HITACHI

SERVICE MANUAL

32PD5000/5100/5200/5300
42PD5000/5100/5200/5300
37PD5200   42PMA500E
55PMA550E   55PD5200

Caution

Be sure to read this manual before servicing. To assure safety from fire, electric shock, injury, harmful radiation and materials, various measures are provided in this HITACHI Plasma display.
Be sure to read cautionary items described in the manual to maintain safety before servicing.

Service Warning

1. Since Panel Module and Front Filter are made of glass, handling the broken Module and Filter shall be taken care sufficiently in order not to be injured.
2. Replacing work shall be started after the Panel Module and the AC/DC Power Supply become sufficiently cool.
3. Special care shall be taken to the display area in order not to damage its surface.
4. The Panel Module shall not be touched with bare hand to protect its surface from stains.
5. It is recommended to use clean soft gloves during the replacing work in order to protect not only the display area of the Panel Module but also a serviceman himself.
6. The Chip Tube of Panel Module (located upper left of the back and surrounded by frame) and flexible cables connecting Panel glasses to drive circuit PWBs are very weak, so shall be taken care sufficiently not to break. If you break Chip Tube, the Panel doesn't display anything forever.

Contents

SPECIFICATIONS AND PARTS ARE SUBJECT TO CHANGE FOR IMPROVEMENT.

Plasma Display

October 2003   Digital Media Division

CAUTION FOR SAFETY

Please read this page before repair the monitor.

This page explains to following items for keep the safety of set and prevent to accident during repair work.

● **We explain by symbol at happen the damage or injury when took wrong repair.**

⚠ **Warning**	This symbol means **"possible to die or heavy damage"**
⚠ **Caution**	This symbol means **"possible to damage or something will break"**

● **We made the symbol as below, which are kind of following items.**

⚠	This symbol means **"CAUTION"**	❗	This symbol means **"MUST"**
⚡	This symbol means **"POSSIBLE to ELECTRIC SHOCK"**	🚫	This symbol means **"DO NOT"**

⚠ WARNING

■ **Should be follows to instructions.**

We indicates to cabinet, chassis and parts by label, which are special attention part. Please follow to note and [Safety Instructions] of User's Manual.

■ **Prevent the electric shock.**

Please take care during working because monitor has high voltage part and power supply part.

Possible to die if you tough to these place by miss take.

Please disconnect power plug during overhaul, reassemble or change parts.

You will die or take damage by electric shock if you touch to live part.

■ **Use recommended components.**

Please use to same characteristic component, which is same as previous for your safety and keep reliability especially marked by ⚠ in parts list and circuit diagram.

It is reason of electric shock or fire if you use non-recommended component.

■ **Should be kept same style of wiring or component.**

Monitor uses tubes or tapes, which made by insulator, and some components are keep distance from surface of PWB for safety.

Internal leads kept from hot part or high voltage part by clamper or styling, so please return to original condition for prevent to electric shock or fire.

■ **Should be done safety check after finished.**

Every part (removed screws, component and wiring) should be returned to previous condition.

Check around repair position for make damage by miss take and measure the insulated impedance by meg-ohm meter.

Confirm the value of impedance, that value is more than 4M ohm.

It is reason for electric shock or fire if that value is less than 4M ohm.

■ **Nobody can check and repair to the code and combination circuit of HDCP.**

Never remove the shield case, which is assembled to the code and combination circuit of HDCP.

PRECAUTIONS

● **How to clean the plasma screen panel of the monitor**

Before cleaning the monitor, turn off the monitor and disconnect the power plug from the power outlet.

To prevent scratching or damaging the plasma screen face, do not knock or rub the surface with sharp or hard objects. Clean the screen with a soft cloth moistened with warm water and dry with a soft cloth. If it is not enough, then use a cloth with mild detergent. Do not use harsh or abrasive cleaners.

● **How to clean the cabinet of the monitor**

Use a soft cloth to clean the cabinet and control panel of the monitor. When excessively soiled dilute a neutral detergent in water, wet and wring out the soft cloth and afterward wipe with a dry soft cloth.

Never use acid/alkaline detergent, alcoholic detergent, abrasive cleaner, powder soap, OA cleaner, car wax, glass cleaner, etc. especially because they would cause discoloration, scratches or cracks.

1. Features

PW1 chassis

This chassis basically constitutes just a MONITOR to use with AVC (Audio Visual Control center). But it can constitute AV MONITOR when applied the VIDEO board, and also a TV when applied the VIDEO board and the TUNER board.

[Common Features]

● **Large-screen, high-definition plasma display panel**

The 42-inch color plasma display panel, with a resolution of 1024 (H) x 1024(V) pixels, and the 32-inch color plasma display panel with a resolution of 852(H) X 1024(V) pixels, creates a high-definition, large-screen (aspect ratio : 16:9) and low-profile flat display. Free from electromagnetic interferences from geomagnetic sources and ambient power lines, the panel produces high-quality display images free from color misconvergence and display distortion.

● **High Performance Digital Processor**

A wide range of personal computer signals can be handled, from 640 x 400, 640 x 480 VGA to 1600 x 1200 UXGA.

● **Easy-to-use remote control and on screen display system**

The remote control included eases the work of setting display controls. Further, the on-screen display system, displays the status of signal reception and display control settings in an easy-to-view fashion.

● **Power saving system**

The International ENERGY STAR® power saver feature saves power consumption automatically when input signals are not available.

When connected to a VESA DPMS-compliant PC, the monitor cuts its power consumption while it is idle.

● **TruBass** TruBass by SRS(●)

TruBass, SRS and (●)® symbol are trademarks of SRS Labs,Inc.

TruBass technology is incorporated under license from SRS Labs, Inc.

[AVC MONITOR model] 42/32PD5000

● DVI-D terminal and 8pin-DIN terminal for AVC input
  (Other terminals, buttons and remote control for use are all with the AVC unit.)

[AV MONITOR model] 42PD5100

● One mini D-sub terminal and one DVI-D terminal for RGB input
  The D-sub terminal can also receive the RGB-component by On-Screen Display control.
● One composite/S.video input terminal and two component video input terminals added with VIDEO board
  One component input is possible to switch to RGB signal input from the Menu screen.
● One SCART terminal for the signal of the European standard added with VIDEO board
  It operates as composite/S.video input and RGB input terminal, or composite video output terminal.
● One composite video output terminal as a monitoring output added with VIDEO board
● Simple type of the remote control

[TV model] 42/37/32PD5200

● Various input/output terminals added with VIDEO board - same to above-mentioned feature of the AV MONITOR model
● Tuner and TELETEXT receiver added with TUNER board
● High performance type of the remote control

PRECAUTIONS

● **How to clean the plasma screen panel of the monitor**

Before cleaning the monitor, turn off the monitor and disconnect the power plug from the power outlet.

To prevent scratching or damaging the plasma screen face, do not knock or rub the surface with sharp or hard objects. Clean the screen with a soft cloth moistened with warm water and dry with a soft cloth. If it is not enough, then use a cloth with mild detergent. Do not use harsh or abrasive cleaners.

● **How to clean the cabinet of the monitor**

Use a soft cloth to clean the cabinet and control panel of the monitor. When excessively soiled dilute a neutral detergent in water, wet and wring out the soft cloth and afterward wipe with a dry soft cloth.

Never use acid/alkaline detergent, alcoholic detergent, abrasive cleaner, powder soap, OA cleaner, car wax, glass cleaner, etc. especially because they would cause discoloration, scratches or cracks.

1. Features

PW1 chassis

This chassis basically constitutes just a MONITOR to use with AVC (Audio Visual Control center). But it can constitute AV MONITOR when applied the VIDEO board, and also a TV when applied the VIDEO board and the TUNER board.

[Common Features]

● **Large-screen, high-definition plasma display panel**

The 37-inch color plasma display panel, with a resolution of 1024 (H) x 1024(V) pixels, creates a high-definition, large-screen (aspect ratio : 16:9) and low-profile flat display. Free from electromagnetic interferences from geomagnetic sources and ambient power lines, the panel produces high-quality display images free from color misconvergence and display distortion.

● **High Performance Digital Processor**

A wide range of personal computer signals can be handled, from 640 x 400, 640 x 480 VGA to 1600 x 1200 UXGA.

(RGB analog input)

● **Easy-to-use remote control and on screen display system**

The remote control included eases the work of setting display controls. Further, the on-screen display system, displays the status of signal reception and display control settings in an easy-to-view fashion.

● **Power saving system**

The International ENERGY STAR® power saver feature saves power consumption automatically when input signals are not available.

When connected to a VESA DPMS-compliant PC, the monitor cuts its power consumption while it is idle.

● **TruBass** **SRS(●)** **TruBass**

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TruBass technology is incorporated under license from SRS Labs, Inc.

[AVC MONITOR model] 37PD5000

● DVI-D terminal and 8pin-DIN terminal for AVC input

   (Other terminals, buttons and remote control for use are all with the AVC unit.)

[TV model] 37PD5200

● One mini D-sub terminal and one DVI-D terminal for RGB input.

   The D-sub terminal can also receive the RGB-component by On-Screen Display control.
● One composite/S.video input terminal and two component video input terminals added with VIDEO board.

   One component input is possible to switch to RGB signal input from the Menu screen.
● One SCART terminal for the signal of the European standard added with VIDEO board.

   It operates as composite/S.video input and RGB input terminal, or composite video output terminal.
● One composite video output terminal as a monitoring output added with VIDEO board.
● Tuner and TELETEXT receiver added with TUNER board.
● High performance type of the remote control

2. Specifications

Panel	Display dimensions	Approx. 32 inches (716 (H) x 399 (V) mm, diagonal 820mm)	Approx. 42 inches (922 (H) x 522 (V) mm, diagonal 1059mm)
	Resolution	852 (H) x 1024 (V) pixels	1024 (H) x 1024 (V) pixels
Net dimensions (excluding Speakers/Stand)		830 (W) x 506 (H) x 92 (D) mm	1030 (W) x 636 (H) x 91 (D) mm
Net weight (excluding Speakers/Stand)		24.6kg	34.9kg
Ambient conditions	Temperature	Operating : 5°C to 35°C, Storage : 0°C to 40°C	
	Relative humidity	Operating : 20% to 80%, Storage : 20% to 90% (non-condensing)	
Power supply		AC100 - 240V, 50/60Hz	
Power consumption/at standby		255W / <3W	365W / <3W
Audio output		12W + 12W (6Ω)	
(RGB input)			
Input signals	Input terminals	RGB1 DVI input terminal (DVI-D) RGB1 audio input terminal (3.5mm Stereo Mini Jack) RGB2 analog RGB input terminal (D-sub 15-pin) RGB2 audio input terminal (3.5mm Stereo Mini Jack)	
	Video signals	0.7 V/1.0 Vp-p, analog RGB (Recommended Signal) 480i, 576i, 480p, 576p, 1080i/50, 1080i/60, 720p/60	
	Sync signals	H/V separate, TTL level [2KΩ] H/V composite, TTL level [2KΩ] Sync on green, 0.3 Vp-p [75Ω]	
(Video input)			
Input signals	Input terminals	AV1: composite video input terminal (RCA) AV1: Y PB PR video input terminal (RCA) AV1: L/R audio input terminal (RCA) AV2: composite video input terminal (RCA) AV2: Y/G PB/B PR/R video input terminal (RCA) AV2: L/R audio input terminal (RCA) AV3: composite video input terminal (RCA) AV3: S video input terminal (RCA) AV3: L/R audio input terminal (RCA) AV4: composite video / S video / RGB / L/R audio input terminal (Scart)	
	Video signals	AV1: PAL, SECAM, NTSC3.58, NTSC4.43 AV1: 480i, 576i, 480p, 576p, 1080i/50, 1080i/60, 720p/60 AV2: PAL, SECAM, NTSC3.58, NTSC4.43 AV2: 480i, 576i, 480p, 576p, 1080i/50, 1080i/60, 720p/60, RGB AV3: PAL, SECAM, NTSC3.58, NTSC4.43 AV4: PAL, SECAM, NTSC3.58, NTSC4.43 AV4: RGB	
Video output Signal		OUTPUT (MONITOR): composite video monitor-output terminal (RCA) OUTPUT (MONITOR): L/R audio monitor- output terminal (RCA) AV4: composite video / L/R audio output terminal (SCART)	
(RF input)			
Input signals	Input terminals	ANT : 75Ω Unbalanced	
	RF Video System	PAL B, G, H / I / D, K SECAM B, G / D, K / K1 NTSC-M	

Applicable video signals for each input terminal

Terminal	RCA/SCART				DVI		D-sub	
Signal	CVBS	S-video	Component	RGB	PC	STB	RGB	Component
AV1	○		○					
AV2	○		○	○				
AV3	○	○						
AV4	○	○		○				
RGB1					○	○		
RGB2							○	○

(○ :Available)

2. Specifications

Panel	Display dimensions	Approx. 37 inches (814 (H) x 445 (V) mm, diagonal 930mm)						
	Resolution	1024 (H) x 1024 (V) pixels						
Net dimensions (excluding Speakers/Stand)		939 (W) x 573 (H) x 98 (D) mm						
Net weight (excluding Speakers/Stand)		29.0kg						
Ambient conditions	Temperature	Operating : 5°C to 35°C, Storage : 0°C to 40°C						
	Relative humidity	Operating : 20% to 80%, Storage : 20% to 90% (non-condensing)						
Power supply		AC100 - 240V, 50/60Hz						
Power consumption/at standby		320W / <3W						
Audio output		12W + 12W (6Ω)						
(RGB input) - 37PD5000TE(*								
Input signals	Input terminals	RGB1 DVI input terminal (DVI-D) RGB1 audio input terminal (3.5mm Stereo Mini Jack) RGB2 analog RGB input terminal (D-sub 15-pin) RGB2 audio input terminal (3.5mm Stereo Mini Jack)						
	Video signals	0.7 V/1.0 Vp-p, analog RGB (Recommended Signal) 480i, 576i, 480p, 576p, 1080i/50, 1080i/60, 720p/60						
	Sync signals	H/V separate, TTL level [2KΩ] H/V composite, TTL level [2KΩ] Sync on green, 0.3 Vp-p [75Ω]						
(Video input) - 37PD5000TE(*								
Input signals	Input terminals	AV1: composite video input terminal (RCA) AV1: Y PB PR video input terminal (RCA) AV1: L/R audio input terminal (RCA) AV2: composite video input terminal (RCA) AV2: Y/G PB/B PR/R video input terminal (RCA) AV2: L/R audio input terminal (RCA) AV3: composite video input terminal (RCA) AV3: S video input terminal (RCA) AV3: L/R audio input terminal (RCA) AV4: composite video / S video / RGB / L/R audio input terminal (Scart)						
	Video signals	AV1: PAL, SECAM, NTSC3.58, NTSC4.43 AV1: 480i, 576i, 480p, 576p, 1080i/50, 1080i/60, 720p/60 AV2: PAL, SECAM, NTSC3.58, NTSC4.43 AV2: 480i, 576i, 480p, 576p, 1080i/50, 1080i/60, 720p/60, RGB AV3: PAL, SECAM, NTSC3.58, NTSC4.43 AV4: PAL, SECAM, NTSC3.58, NTSC4.43 AV4: RGB						
Video output Signal		OUTPUT (MONITOR): composite video monitor-output terminal (RCA) OUTPUT (MONITOR): L/R audio monitor- output terminal (RCA) AV4: composite video / L/R audio output terminal (SCART)						
(RF input) - 37PD5000TE(*								
Input signals	Input terminals	ANT : 75Ω Unbalanced						
	RF Video System	PAL B, G, H / I / D, K SECAM B, G / D, K / K1 / L, L'						

*) 37PD5000TE:Refer to the Service Manual for 32/42PD3000(AV3000E).

Applicable video signals for each input terminal (37PD5000TE)

Terminal	RCA/SCART				DVI		D-sub	
Signal	CVBS	S-video	Component	RGB	PC	STB	RGB	Component
AV1	○		○					
AV2	○		○	○				
AV3	○	○						
AV4	○	○		○				
RGB1					○	○		
RGB2							○	○

(○:Available)

2. Specifications

		55PMA500E	
Panel	Display dimensions	Approx. 55 inches (1229 (H) x 691 (V) mm, diagonal 1410mm)	
	Resolution	1366 (H) x 768 (V) pixels	
Net dimensions (excluding Speakers/Stand)		1394 (W) x 857 (H) x 105 (D) mm	
Net weight (excluding Speakers/Stand)		63.5kg	
Ambient conditions	Temperature	Operating : 5°C to 35°C, Storage : 0°C to 40°C	
	Relative humidity	Operating : 20% to 80%, Storage : 20% to 90% (non-condensing)	
Power supply		AC100 - 240V, 50/60Hz	
Power consumption/at standby		530W / <3W	
Audio output		12W + 12W (6Ω), sub woofer terminal (RCA)	
(RGB input)			
Input signals	Input terminals	RGB1 DVI input terminal (DVI-D) RGB1 audio input terminal (3.5mm Stereo Mini Jack) RGB2 analog RGB input terminal (D-sub 15-pin) RGB2 audio input terminal (3.5mm Stereo Mini Jack)	
	Video signals	0.7 V/1.0 Vp-p, analog RGB (Recommended Signal) 480i, 576i, 480p, 576p, 1080i/50, 1080i/60, 720p/60	
	Sync signals	H/V composite, TTL level (2KΩ) H/V separate, TTL level (2KΩ) Sync on green, 0.3 Vp-p (75Ω)	
Recommended signal		47 modes	
(Video input)			
Input signals	Input terminals	AV1: composite video input terminal (RCA) AV1: Y PB PR video input terminal (RCA) AV1: L/R audio input terminal (RCA) AV2: composite video input terminal (RCA) AV2: Y/G PB/B PR/R video input terminal (RCA) AV2: L/R audio input terminal (RCA) AV3: composite video input terminal (RCA) AV3: S video input terminal (RCA) AV3: L/R audio input terminal (RCA) AV4: composite video / S video / RGB / L/R audio input terminal (Scart)	
	Video signals	AV1: PAL, SECAM, NTSC3.58, NTSC4.43 / AV1: NTSC-M, PAL-M, PAL-N AV1: 480i, 576i, 480p, 576p, 1080i/50, 1080i/60, 720p/60 AV2: PAL, SECAM, NTSC3.58, NTSC4.43 / AV2: NTSC-M, PAL-M, PAL-N AV2: 480i, 576i, 480p, 576p, 1080i/50, 1080i/60, 720p/60, RGB AV3: PAL, SECAM, NTSC3.58, NTSC4.43 / AV3: NTSC-M, PAL-M, PAL-N AV4: PAL, SECAM, NTSC3.58, NTSC4.43 / AV4: NTSC-M, PAL-M, PAL-N AV4: RGB	
Video output Signal		OUTPUT (MONITOR): composite video monitor-output terminal (RCA) OUTPUT (MONITOR): L/R audio monitor- output terminal (RCA) AV4: composite video / L/R audio monitor-output terminal (SCART)	
Recommended signal		15 modes	13 modes

The monitor takes at least 30 minutes to attain the status of optimal picture quality.

Applicable video signals for each input terminal
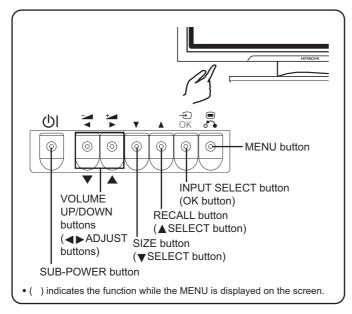
Terminal	RCA/SCART				DVI		D-sub	
Signal	CVBS	S-video	Component	RGB	PC	STB	RGB	Component
AV1	○		○					
AV2	○		○	○				
AV3	○	○						
AV4	○	○		○				
RGB1					○	○		
RGB2							○	○

(○:Available)
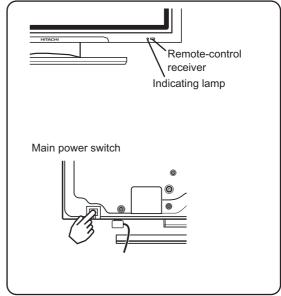
Component names

[Main unit]

Remote-control receiver

Indicating lamp

MENU button

Main power switch

INPUT SELECT button (OK button)

RECALL button (▲SELECT button)

VOLUME UP/DOWN buttons (◄►ADJUST buttons)

SIZE button (▼SELECT button)

SUB-POWER button

• ( ) indicates the function while the MENU is displayed on the screen.

[Remote control]

CLE-958
(for 37PD5000TE)

CLE-952A
(for 37PD5000VE)

----- packed with
AV3000E

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3. Service points

● Lead free solder

This product uses lead free solder (unleaded) to help preserve the environment. Please read these instructions before attempting any soldering work.

> **Caution:** Always wear safety glasses to prevent fumes or molten solder from getting into the eyes. Lead free solder can splatter at high temperatures (600˚C).

■ Lead free solder indicator

Printed circuit boards using lead free solder are engraved with an "F."

■ Properties of lead free solder

The melting point of lead free solder is 40-50˚C higher than leaded solder.

■ Servicing solder

Solder with an alloy composition of Sn-3.0Ag-0.5Cu or Sn-0.7Cu is recommended.

Although servicing with leaded solder is possible, there are a few precautions that have to be taken. (Not taking these precautions may cause the solder to not harden properly, and lead to consequent malfunctions.)

Precautions when using leaded solder
● Remove all lead free solder from soldered joints when replacing components.
● If leaded solder should be added to existing lead free joints, mix in the leaded solder thoroughly after the lead free solder has been completely melted (do not apply the soldering iron without solder).

■ Servicing soldering iron

A soldering iron with a temperature setting capability (temperature control function) is recommended.

The melting point of lead free solder is higher than leaded solder. Use a soldering iron that maintains a high stable temperature (large heat capacity), and that allows temperature adjustment according to the part being serviced, to avoid poor servicing performance.

Recommended soldering iron:
● Soldering iron with temperature control function (temperature range: 320-450˚C)

Recommended temperature range per part:

Part	Soldering iron temperature
Mounting (chips) on mounted PCB	320˚C±30˚C
Mounting (chips) on empty PCB	380˚C±30˚C
Chassis, metallic shield, etc.	420˚C±30˚C

```
──────── The PWB assembly which has used lead free solder ────────
  ① FILTER PWB, SW PWB, LED/RECEIVER PWB, TACT SW PWB, SP TERMINAL(L/R) PWB
  ② AUDIO PWB, JOINT PWB
  ③ VIDEO PWB (42PD5000MA, 32/42PD5000TA)
  ④ TUNER PWB (32/42PD5000TA/55PD5200)
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4. Difference table

● PWB Ass'y

PWB Ass'y	Model Symbol No. of Electric Components	32/42PD5000 TA	32/42PD5000 MA	32/42PD5000 VA
MAIN SW, FILTER, TACT SW, SP.TERMINAL(L/R), LED/RECEIVER board	x9xx, xMxx, x48x, x0xx	O	O	O
AUDIO board	x4xx	O	O	O
JOINT board	xFxx, xHxx	O	O	O
VIDEO board	x2xx, x3xx, x5xx, x6xx, xRxx	O	O	X
TUNER board	x1xx, xNxx, xTxx	O	X	X

(O: Applied   X: Not Applied)

● Other components (32V)

MODEL NAME	32PD5000TA		32PD5000VA	
SYMBOL No.	PARTS No.	DESCRIPTION	PARTS No.	DESCRIPTION
#01SA	86994102	SCREW BT BIND HEAD 3X10	-	-
#01SB1	4525404	SCREW M3X10 T	-	-
#01SB2	4525404	SCREW M3X10 T	-	-
#02SB3	4525401	SCREW M3X8	-	-
#03SB4	4525404	SCREW M3X10 T	-	-
#04SC	4525404	SCREW M3X10 T	-	-
#05	QL23991	EXTEND LABEL VT	-	-
#11	SG35204	CARTON BOX	SG35207	CARTON BOX
A11	JP06951	PWB ASS'Y VIDEO	-	-
A22	JP06961	PWB ASS'Y TUNER-A	-	-
ETV1	2908801	CONNECTOR 8P	-	-
ETV2	EK01108	WIRE (PROCESSED) 50P	-	-
E04	EW08102	CABLE SCART-RCA (3PIN)	-	-
NVS6	2169511	NOISE FILTER ZCAT1518-0730	-	-
NVS9	2169511	NOISE FILTER ZCAT1518-0730	-	-
N01	QR58552	INSTRUCTION MANUAL (EN/CH1/CH2/JP)	-	-
U001	HL02041	REMOTE CONTROL TRANSMITTER CLE-958	-	-

● Other components (42V)

MODEL NAME	42PD5000TA		42PD5000MA		42PD5000VA	
SYMBOL No.	PARTS No.	DESCRIPTION	PARTS No.	DESCRIPTION	PARTS No.	DESCRIPTION
#01SA	86994102	SCREW BT BIND HEAD 3X10	86994102	SCREW BT BIND HEAD 3X10	-	-
#01SB1	4525404	SCREW M3X10 T	-	-	-	-
#01SB2	4525404	SCREW M3X10 T	4525404	SCREW M3X10 T	-	-
#01	SG35188	CARTON BOX	SG35473	CARTON BOX	SG35187	CARTON BOX
#02	SG35191	TRAY (CARTON BOX)	SG33131	TRAY (CARTON BOX)	SG35191	TRAY (CARTON BOX)
#02SB3	4525401	SCREW M3X8	4525401	SCREW M3X8	-	-
#03	SP08506	CUSHION TOP	SP08521	TOP CUSHION	SP08506	CUSHION TOP
#03SB4	4525404	SCREW M3X10 T	4525404	SCREW M3X10 T	-	-
#04	SP08512	CUSHION BOTTOM	SP08531	BOTTOM CUSHION	SP08512	CUSHION BOTTOM
#04SC	4525404	SCREW M3X10 T	4525404	SCREW M3X10 T	-	-
#05	QL23991	EXTEND LABEL VT	QL23992	EXTEND LABEL V	-	-
#06	-	-	SG35691	PAD PROTECTOR	-	-
#08S	SG34401	FRONT PAD	-	-	SG34401	FRONT PAD
#300	QJ01192	STAND ASS'Y	-	-	QJ01192	STAND ASS'Y
#641	-	-	-	-	4522885	SCREW 3X8 CE CP-GRIP
#790	MJ03041	BOLT M6X25 WITH WASHER	-	-	MJ03041	BOLT M6X25 WITH WASHER
A11	JP06951	PWB ASS'Y VIDEO	JP06951	PWB ASS'Y VIDEO	-	-
A22	JP06961	PWB ASS'Y TUNER-A	-	-	-	-
ETV1	2908801	CONNECTOR 8P	-	-	-	-
ETV2	EK01108	WIRE (PROCESSED) 50P	-	-	-	-
E02	EV01691	CORD POWER SUPPLY	-	-	EV01691	CORD POWER SUPPLY
E04	EY01951	ADAPTOR RCA-SCART CONVERSION	EY01951	ADAPTOR RCA-SCART CONVERSION	-	-
N01	QR58551	INSTRUCTION MANUAL (EN/CH1/CH2/JP)	QR58552	INSTRUCTION MANUAL (EN/CH1/CH2/JP)	-	-
SPU	GM01262	SPEAKER UNIT ASS'Y DARK SILVER	-	-	GM01262	SPEAKER UNIT ASS'Y DARK SILVER
U001	HL02041	REMOTE CONTROL TRANSMITTER CLE-958	HL01904	REMOTE CONTROL TRANSMITTER CP-RD4S	-	-
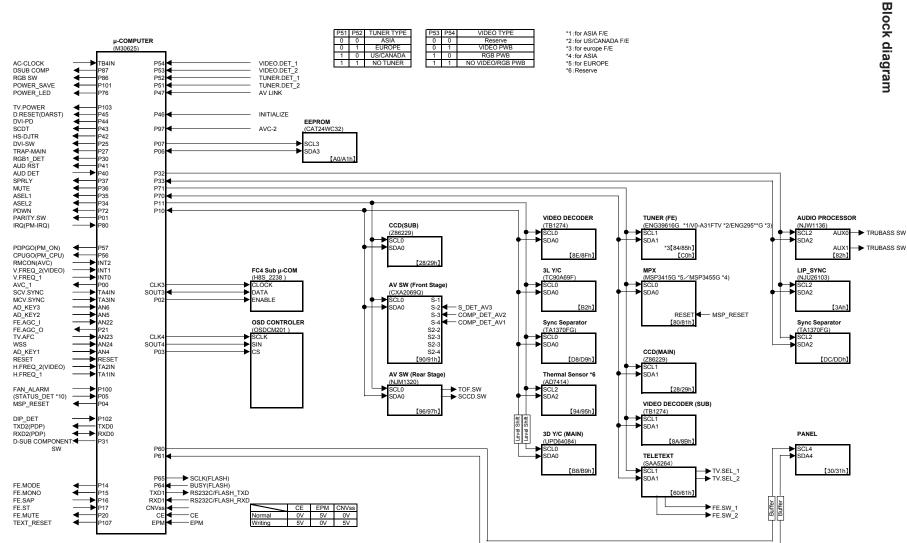
5. New adoption technology

[System control micom I001(M3062)]

• Pin function table

No.	Pin Name	I/O	Function
1	OSD_DATA	O	OSD DATA
2	OSD_CLK	O	OSD CLOCK
3	AC-CLOCK	I	AC CLOCK
4	FE.AGC_O	O	AGC Voltage (F/E)
5	DATA_OUT(FC)	O	FC DATA
6	DATA_IN(FC)	I	FC DATA
7	CLK(FC)	O	FC CLOCK
8	BYTE	I	GND
9	CNVSS	I	CNVSS(FLASH)
10	DSUB COMP	O	SYNC-SW (AV1-4,D-sub_RGB: L, DVI,D-sub_Component: H)
11	RGBSW	O	SYNC-SW (AV1-4,D-sub_Component: L, DVI,D-sub_RGB: H)
12	$\overline{\text{RESET}}$	I	RESET
13	XOUT	O	16MHz OSC.OUT
14	VSS	I	GND
15	XIN	I	16MHz OSC.IN
16	VCC1	I	5V
17	$\overline{\text{NMI}}$	I	5V Pull-up
18	RMCON	I	IR Signal
19	V.FREQ_2	I	SYNC for V.Frequency Detection (Sub Picture)
20	V.FREQ_1	I	SYNC for V.Frequency Detection (Main Picture)
21	SCV.SYNC	I	CVBS for SYNC Detection (Sub Picture)
22	IRQ	I	PANEL MODULE Condition (L: Normal, H: Error)
23	MCV.SYNC	I	CVBS for SYNC Detection (Main Picture)
24	LED_GREEN	O	L: LED ON (PowerON/PowerSave), H: LED OFF (Standby)
25	H.FREQ_2	I	SYNC for H.Frequency Detection (Sub Picture)
26	RESERVE	-	NC
27	H.FREQ_1	I	SYNC for H.Frequency Detection (Main Picture)
28	PDWN	O	RESERVE (LVDS POWER DOWN MODE (Panel)) : Always High
29	SCL1	O	IIC-BUS CONTROL CLOCK (TUNER PWB)
30	SDA1	I/O	IIC-BUS CONTROL DATA (TUNER PWB)
31	TXD1	O	DATA (RS-232C)
32	RXD1	I	DATA (RS-232C)
33	SCLK	I	CLOCK (FLASH MEMORY Writing)
34	BUSY	O	BUSY (FLASH MEMORY Writing)
35	TXD2	O	RESERVE
36	RXD2	I	RESERVE
37	SDA4	I/O	IIC-BUS CONTROL DATA (PDP PANEL)
38	SCL4	I/O	IIC-BUS CONTROL CLOCK (PDP PANEL)
39	PDPGO	O	PANEL MODULE Start (L: STANDBY, H: ON)
40	CPUGO	O	MPU Recoverly of PANEL MODULE
41	EPM	I	EPM (FLASH MEMORY Writing)
42	VIDEO.DET_1	I	Detecting VIDEO PWB (L: 8pin_PWB, H: No PWB/VIDEO PWB)
43	VIDEO.DET_2	I	Detecting VIDEO PWB (L: 8pin_PWB/VIDEO PWB, H: No PWB)
44	TUNER.DET_1	I	Detecting TUNER PWB (L: ASIA, H: EURO/No PWB)
45	TUNER.DET_2	I	Detecting TUNER PWB (L: ASIA/EURO, H: No PWB)
46	CE	I	CE (FLASH MEMORY Writing)
47	AV LINK	I	AV LINK Scart Connector
48	INITIALIZE	I	Initializing EEPROM (L: INIT, H: Normal)
49	D.RESET	O	RESET (DVI)
50	DVI-PD	O	DVI Control (PowerOFF,PowerSave(except DVI): L, PowerON,PowerSave(DVI): H)

No.	Pin Name	I/O	Function
51	SCDT	I	RESERVE : Always High-Impedance
52	HS-DJTR	O	Jitter Control (DVI) : Always Low
53	AUD RST	O	RESET for LIPSYNC IC
54	AUD DET	I	Detecting Connection of LIPSYNC IC (L: Yes, H: No)
55	SPRLY	O	SPEAKER ON/OFF Relay Control (L: ON(MUTE-OFF), H: OFF(MUTE-ON))
56	MUTE	O	AUDIO MUTE (L: MUTE-OFF, H: MUTE-ON)
57	ASEL1	O	AUDIO Signal SW (D-sub,AVC: L, VIDEO,DVI: H)
58	ASEL2	O	AUDIO Signal SW (VIDEO,AVC: L, DVI,D-sub: H)
59	SDA2	I/O	IIC-BUS CONTROL DATA (Sync-Sep., Audio Processor etc.)
60	SCL2	O	IIC-BUS CONTROL CLOCK (Sync-Sep., Audio Processor etc.)
61	D-SUB COMP_SYNC.SW	O	SYNC-SW (D-sub_Component: H, Others: L)
62	VCC2	I	5V
63	DSUB_DET1	I	RGB1-DET
64	VSS	I	GND
65	TRAP-MAIN	O	L: TRAP OFF (1080i,720p), H: TRAP ON (576i/p,480i/p)
66	RESERVE	-	NC
67	DVI.SW	O	L: Analog, H: Digital (DVI)
68	WSS	I	STATUS(WSS) of SCART INPUT (AV4) (L: No Signal, M: 4:3, H: 16:9)
69	TV-AFC	I	AFC Voltage (F/E)
70	FE.AGC_I	I	AGC Voltage (F/E)
71	RESERVE	-	NC
72	FE.MUTE	-	NC
73	FE.ST	-	NC
74	FE..SAP	-	NC
75	FE.MONO	-	NC
76	FE.MODE	-	NC
77	RESERVE	-	NC
78	RESERVE	-	NC
79	SCL0	O	IIC-BUS CONTROL CLOCK (VIDEO PWB)
80	SDA0	I/O	IIC-BUS CONTROL DATA (VIDEO PWB)
81	SCL3	O	IIC-BUS CONTROL CLOCK (EEPROM)
82	SDA3	I/O	IIC-BUS CONTROL DATA (EEPROM)
83	MSP.STATUS	I	MPX STATUS (L: Fixed, H: Changed)
84	MSP.RESET	O	RESET (MPX)
85	OSD_CS	O	OSD CHIP SELECT
86	FC_ENABLE	O	FC ENABLE
87	PARITY.SW	O	L: FC4, H: AVC
88	AVC1	I	Detecting AVC Connection/Power (No Power or Without 24pin Cable : L, Others : H)
89	TEXT-RESET	O	RESET (T/TEXT)
90	AD_KEY3	I	AD KEY3: POWER
91	AD_KEY2	I	AD KEY2: PR UP/DWN, VOL UP/DWN, MENU
92	AD_KEY1	I	AD KEY1: INPUT
93	TV_POWER	O	POWER ON/OFF (L: STANDBY, H: ON/PowerSave)
94	DIP.DET	I	L: Normal(No DIP), H: Abnormal(Detect DIP)
95	LED_RED	O	L: LED ON (Standby/PowerSave), H: LED OFF (PowerON)
96	AVSS	I	GND
97	FAN_ALARM	I	L: Normal, H: Abnormal
98	VREF	I	5V
99	AVCC	I	5V
100	AVC2	I	Detecting AVC Connection/Power (No Power or Without 8pin Cable : L, Others : H)

32PD5000/42PD5000 (PW1)

14

μ-COMPUTER
(M30625)

P51	P52	TUNER TYPE
0	0	ASIA
0	1	EUROPE
1	0	US/CANADA
1	1	NO TUNER

P53	P54	VIDEO TYPE
0	0	Reserve
0	1	VIDEO PWB
1	0	RGB PWB
1	1	NO VIDEO/RGB PWB

*1 : for ASIA F/E
*2 : for US/CANADA F/E
*3 : for europe F/E
*4 : for ASIA
*5 : for EUROPE
*6 : Reserve

AC-CLOCK — TB4IN
DSUB COMP — P87
RGB SW — P86
POWER_SAVE — P101
POWER_LED — P76

P54 — VIDEO.DET_1
P53 — VIDEO.DET_2
P52 — TUNER.DET_1
P51 — TUNER.DET_2
P47 — AV LINK

TV.POWER — P103
D.RESET(DARST) — P45
DVI-PD — P44
SCDT — P43
HS-DJTR — P42
DVI-SW — P25
TRAP-MAIN — P27
RGB1_DET — P30
AUD RST — P41
AUD DET — P40
SPRLY — P37
MUTE — P36
ASEL1 — P35
ASEL2 — P34
PDWN — P72
PARITY.SW — P01
IRQ(PM-IRQ) — P80

P46 — INITIALIZE
P97 — AVC-2

EEPROM
(CAT24WC32)
SCL3
SDA3
【A0/A1h】

P07
P06

P32
P33
P71
P70
P11
P10

PDPGO(PM_ON) — P57
CPUGO(PM_CPU) — P56
RMCON(AVC) — INT2
V.FREQ_2(VIDEO) — INT1
V.FREQ_1 — INT0
AVC_1 — P00
SCV.SYNC — TA4IN
MCV.SYNC — TA3IN
AD_KEY3 — AN6
AD_KEY2 — AN5
FE.AGC_I — AN22
FE.AGC_O — P21
TV.AFC — AN23
WSS — AN24
AD_KEY1 — AN4
RESET — RESET
H.FREQ_2(VIDEO) — TA2IN
H.FREQ_1 — TA1IN

FAN_ALARM — P100
(STATUS_DET *10) — P05
MSP_RESET — P04

DIP_DET — P102
TXD2(PDP) — TXD0
RXD2(PDP) — RXD0
D-SUB COMPONENT SW — P31

P60
P61

FE.MODE — P14
FE.MONO — P15
FE.SAP — P16
FE.ST — P17
FE.MUTE — P20
TEXT_RESET — P107

CLK3 — CLOCK
SOUT3 — DATA
P02 — ENABLE

FC4 Sub μ-COM
(H8S_2238)
CLOCK
DATA
ENABLE

OSD CONTROLER
(OSDCM201)
SCLK
SIN
CS

CLK4 — SCLK
SOUT4 — SIN
P03 — CS

P65 — SCLK(FLASH)
P64 — BUSY(FLASH)
TXD1 — RS232C/FLASH_TXD
RXD1 — RS232C/FLASH_RXD
CNVss
CE — CE
EPM — EPM

	CE	EPM	CNVss
Normal	0V	5V	0V
Writing	5V	0V	5V

CCD(SUB)
(Z86229)
SCL0
SDA0
【28/29h】

AV SW (Front Stage)
(CXA2069Q)
SCL0   S-1
SDA0   S-2   S_DET_AV3
       S-3   COMP_DET_AV2
       S-4   COMP_DET_AV1
       S2-2
       S2-3
       S2-3
       S2-4
【90/91h】

AV SW (Rear Stage)
(NJM1320)
SCL0   TOF.SW
SDA0   SCCD.SW
【96/97h】

VIDEO DECODER
(TB1274)
SCL0
SDA0
【8E/8Fh】

3L Y/C
(TC90A69F)
SCL0
SDA0
【B2h】

Sync Separator
(TA1370FG)
SCL0
SDA0
【D8/D9h】

Thermal Sensor *6
(AD7414)
SCL2
SDA2
【94/95h】

Level Shift
Level Shift

3D Y/C (MAIN)
(UPD64084)
SCL0
SDA0
【B8/B9h】

TUNER (FE)
(ENG39616G *1/V0-A31FTV *2/ENG295**G *3)
SCL1
SDA1
*3【84/85h】
【C0h】

MPX
(MSP3415G *5／MSP3455G *4)
SCL0
SDA0
RESET — MSP_RESET
【80/81h】

CCD(MAIN)
(Z86229)
SCL1
SDA1
【28/29h】

VIDEO DECODER (SUB)
(TB1274)
SCL1
SDA1
【8A/8Bh】

TELETEXT
(SAA5264)
SCL1   TV.SEL_1
SDA1   TV.SEL_2
【60/61h】
FE.SW_1
FE.SW_2

AUDIO PROCESSOR
(NJW1136)
SCL2   AUX0 — TRUBASS SW
SDA2   AUX1 — TRUBASS SW
【82h】

LIP_SYNC
(NJU26103)
SCL2
SDA2
【3Ah】

Sync Separator
(TA1370FG)
SCL2
SDA2
【DC/DDh】

PANEL
SCL4
SDA4
【30/31h】

Buffer
Buffer

6. Adjustment

● **How to get to Adjustment mode**

Using the front control buttons with the set turned off (standby) can activate it.

Press the SUB-POWER(⏻) button, INPUT SELECT(⟲) button and ▼ button at the same time, and hold for more than 5 seconds.

The set turns on in adjustment mode with OSD.

● **Changing data and Selecting Adjustment code**

When the set is in adjustment mode, the cursor ◄ , ► , ▲ , ▼ and OK buttons of the remote control or front panel may be used as the adjustment keys.

▲ , ▼ buttons are used for selecting adjustment code.

◄ , ► buttons are used for changing data values.

OK button is used for confirming the data.

After finishing the necessary adjustment press MENU button. Adjustment mode is released and the set returns to normal condition.

● **Memory Initialize operation**

NOTE: The execution of this function returns the adjustment codes to the preset values, therefore, adjustment data will be lost.

Procedure

(1) Enter Adjustment Mode.

(2) Select MEMORY INIT adjustment code (No.704) and change the data value from 0 to 1.

(3) Activate MEMORY INIT by pressing OK button for more than 3 seconds.

(4) Select No.374 and change data value from 1 to 0.

(5) Check that the receiving channel goes to AV1. Unit is set to preset values.

32PD5000/42PD5000 (PW1)

● Service adjustment items by I^{2}C-bus control (except 32/42PD5000VA$^{(*)}$)

○: should be adjusted
▲: should be followed previous data

ADJ No.	Function — Adjustment Items	Function — Mode	Maximum Value	Default 32"	Default 42"	FORMATTER PWB	VIDEO PWB	TUNER PWB	PDP Panel
0	R DRIVE1 [TV/VIDEO/DSUB-COMP]	COOL	255	255	255	▲			○
1	G DRIVE1 [TV/VIDEO/DSUB-COMP]	COOL	255	255	255	▲			○
2	B DRIVE1 [TV/VIDEO/DSUB-COMP]	COOL	255	255	255	▲			○
3	R DRIVE2 [TV/VIDEO/DSUB-COMP]	NORMAL	255	255	255	▲			○
4	G DRIVE2 [TV/VIDEO/DSUB-COMP]	NORMAL	255	255	255	▲			○
5	B DRIVE2 [TV/VIDEO/DSUB-COMP]	NORMAL	255	255	255	▲			○
6	R DRIVE3 [TV/VIDEO/DSUB-COMP]	WARM	255	255	255	▲			○
7	G DRIVE3 [TV/VIDEO/DSUB-COMP]	WARM	255	255	255	▲			○
8	B DRIVE3 [TV/VIDEO/DSUB-COMP]	WARM	255	255	255	▲			○
9	R DRIVE4 [TV/VIDEO/DSUB-COMP]	BLACK & WHITE	255	255	255	▲			○
10	G DRIVE4 [TV/VIDEO/DSUB-COMP]	BLACK & WHITE	255	255	255	▲			○
11	B DRIVE4 [TV/VIDEO/DSUB-COMP]	BLACK & WHITE	255	255	255	▲			○
12	R DRIVE1 [DVI-PC/DVI-STB/DSUB-RGB]	COOL	255	255	255	▲			○
13	G DRIVE1 [DVI-PC/DVI-STB/DSUB-RGB]	COOL	255	255	255	▲			○
14	B DRIVE1 [DVI-PC/DVI-STB/DSUB-RGB]	COOL	255	255	255	▲			○
15	R DRIVE2 [DVI-PC/DVI-STB/DSUB-RGB]	NORMAL	255	255	255	▲			○
16	G DRIVE2 [DVI-PC/DVI-STB/DSUB-RGB]	NORMAL	255	255	255	▲			○
17	B DRIVE2 [DVI-PC/DVI-STB/DSUB-RGB]	NORMAL	255	255	255	▲			○
18	R DRIVE3 [DVI-PC/DVI-STB/DSUB-RGB]	WARM	255	255	255	▲			○
19	G DRIVE3 [DVI-PC/DVI-STB/DSUB-RGB]	WARM	255	255	255	▲			○
20	B DRIVE3 [DVI-PC/DVI-STB/DSUB-RGB]	WARM	255	255	255	▲			○
21	R DRIVE4 [DVI-PC/DVI-STB/DSUB-RGB]	BLACK & WHITE	255	255	255	▲			○
22	G DRIVE4 [DVI-PC/DVI-STB/DSUB-RGB]	BLACK & WHITE	255	255	255	▲			○
23	B DRIVE4 [DVI-PC/DVI-STB/DSUB-RGB]	BLACK & WHITE	255	255	255	▲			○
24	Black Level(RGB_AMP)	TV/VIDEO	254	127	127				
25	Black Level(RGB_AMP)	PC	254	127	127				
26	Reference Amplitude(RGB_AMP)	TV/VIDEO	254	127	127				
27	Reference Amplitude(RGB_AMP)	PC	254	127	127				
28	Display for Max. Amplitude Level	Main	-	-	-				
29	Display for Max. Amplitude Level	SUB	-	-	-				
30	SUB_CONTRAST(RF)	MAIN	15	8	8				
31	SUB_CONTRAST (AV1)	MAIN/SUB COMPOSITE mode	15	7	7				
32	SUB_CONTRAST(RF)	SUB	15	8	8				
33	SUB_CONTRAST (AV4)	MAIN/SUB COMPOSITE mode	15	7	7				
34	SUB_COLOR (VIDEO-PAL/SECAM)	MAIN	15	6	6				
35	SUB_COLOR (RF-PAL/SECAM)	MAIN	15	8	8				
36	SUB_COLOR (VIDEO-NTSC)	MAIN	15	8	8				
37	SUB_COLOR (RF-NTSC)	MAIN	15	6	6				
38	SUB_COLOR (VIDEO-PAL/SECAM)	SUB	15	8	8				
39	SUB_COLOR (RF-PAL/SECAM)	SUB	15	8	8				
40	SUB_COLOR (VIDEO-NTSC)	SUB	15	8	8				
41	SUB_COLOR (RF-NTSC)	SUB	15	8	8				
42	TINT (VIDEO)	MAIN	63	33	33	▲	○		
43	TINT (RF)	MAIN	63	33	33	▲	○		
44	TINT (VIDEO)	SUB	63	33	33	▲	○		
45	TINT (RF)	SUB	63	33	33	▲	○		
46	S_B-Y_ADJ	MAIN	15	8	8				
47	S_R-Y_ADJ	MAIN	15	8	8				
48	S_B-Y_ADJ	SUB	15	8	8				
49	S_R-Y_ADJ	SUB	15	8	8				
50	BPF_Q (4.43MHz)	MAIN	3	3	3				
51	BPF_f0 (4.43MHz)	MAIN	3	1	1				
52	Y_DL (4.5MHz) For Asia	MAIN	10	5	5				
53	Y_DL (5.5MHz PAL/NTSC4.43) For Asia	MAIN	10	3	3				
54	Y_DL (5.5MHz SECAM) For Asia	MAIN	10	0	0				
55	Y_DL (6.0PAL/NTSC4.43) For Asia	MAIN	10	9	9				
56	Y_DL (6.0SECAM) For Asia	MAIN	10	9	9				
57	Y_DL (VIDEO PAL/NTSC4.43)	MAIN	10	6	6				
58	Y_DL (VIDEO SECAM)	MAIN	10	8	8				
59	Y_DL (VIDEO NTSC)	MAIN	10	6	6				
60	BELL_f0	MAIN	1	0	0				
61	Y_OUT_LEVEL (VIDEO)	MAIN	63	13	13				
62	Free								
63	Y_OUT_LEVEL (TEXT)	MAIN	63	0	0				
64	C_OUT_LEVEL (VIDEO)	MAIN	63	7	7				
65	Free								
66	C_OUT_LEVEL (TEXT)	MAIN	63	0	0				
67	Y_OUT_LEVEL (TEXT)	SUB	63	12	12				
68	Y_OUT_LEVEL (VIDEO)	SUB	63	13	13				
69	Free								
70	C_OUT_LEVEL (TEXT)	SUB	63	7	7				
71	C_OUT_LEVEL (VIDEO)	SUB	63	7	7				
72	Free								
73	BPF_Q (4.43MHz)	SUB	3	3	3				
74	BPF_f0 (4.43MHz)	SUB	3	1	1				
75	Y_DL (4.5MHz) For Asia	SUB	10	5	5				
76	Y_DL (5.5MHz PAL/NTSC4.43) For Asia	SUB	10	2	2				
77	Y_DL (5.5MHz SECAM) For Asia	SUB	10	0	0				
78	Y_DL (6.0PAL/NTSC4.43) For Asia	SUB	10	7	7				
79	Y_DL (6.0SECAM) For Asia	SUB	10	10	10				
80	Y_DL (VIDEO PAL/NTSC4.43)	SUB	10	8	8				
81	Y_DL (VIDEO SECAM)	SUB	10	6	6				
82	Y_DL (VIDEO NTSC)	SUB	10	5	5				
83	BELL_f0	SUB	1	0	0				
84	C_TRAP_SW (COMB=OFF-PAL/NTSC4.43/NTSC3.58)	MAIN	1	0	0				
85	C_TRAP_SW (COMB=OFF-PAL/NTSC4.43/NTSC3.58)	SUB	1	0	0				
86	MVM (VIDEO)	-	1	0	0				
87	AFC_GAIN (AV00)	-	3	0	0				
88	AFC_GAIN (AV1)	-	3	0	0				

* 32/42PD5000VA : Refer to the Service Manual for PD32/42-A3000(No.003E).

32PD5000/42PD5000 (PW1)

O: should be adjusted
▲: should be followed previous data

ADJ. No.	Function — Adjustment Items	Mode	Maximum Value	Default 32"	Default 42"	FORMATTER PWB	VIDEO PWB	TUNER PWB	PDP Panel
89	AFC_GAIN (AV2)	-	3	0	0				
90	AFC_GAIN (AV3)	-	3	0	0				
91	AFC_GAIN (AV4)	-	3	0	0				
92	S_INHBT	-	1	0	0				
93	S_ID	-	1	0	0				
94	S_GP	-	3	0	0				
95	S_V_ID	-	1	0	0				
96	BELL/HPF	-	3	3	3				
97	Cb offset1	MAIN	15	8	8				
98	Cr offset1	MAIN	15	8	8				
99	Cb offset1	SUB	15	8	8				
100	Cr offset1	SUB	15	8	8				
101	Sharpness Gain(VIDEO) PAL	MAIN	15	8	8				
102	Sharpness Gain(RF)	MAIN	15	8	8				
103	Sharpness EQ(4.5MHz)	MAIN	3	1	1				
104	Sharpness EQ(5.5MHz)	MAIN	3	1	1				
105	Sharpness EQ(6.0/6.5MHz)	MAIN	3	1	1				
106	Sharpness EQ(VIDEO)	MAIN	3	1	1				
107	Sharpness f0(VIDEO) PAL	MAIN	3	2	2				
108	Sharpness f0(RF)	MAIN	3	2	2				
109	Sharpness Gain(VIDEO) PAL	SUB	15	9	9				
110	Sharpness Gain(RF)	SUB	15	10	10				
111	Sharpness EQ(4.5MHz)	SUB	3	1	1				
112	Sharpness EQ(5.5MHz)	SUB	3	1	1				
113	Sharpness EQ(6.0/6.5MHz)	SUB	3	1	1				
114	Sharpness EQ(VIDEO)	SUB	3	1	1				
115	Sharpness f0(VIDEO) PAL	SUB	3	2	2				
116	Sharpness f0(RF)	SUB	3	2	2				
117	LPF	MAIN	1	0	0				
118	LPF	SUB	1	0	0				
119	SECAM D-Trap	MAIN/SUB	1	1	1				
120	FILTER SW(RF)	MAIN	1	0	0				
121	FILTER SW(RF)	SUB	1	0	0				
122	NTSC Comb(Comb off)	SUB	1	1	1				
123	HS Phase	MAIN	1	0	0				
124	HS Phase	SUB	1	0	0				
125	P/N ID	MAIN	1	0	0				
126	P/N ID	SUB	1	0	0				
127	Y/C_SEP_MODE (COMB=OFF-PAL)	-	3	0	0				
128	Y-Pf$_0$	-	1	0	0				
129	Y-EQ_GAIN	-	3	2	2				
130	Y-EQ/N.C_LIM	-	3	0	0				
131	Y-LPF	-	1	0	0				
132	V-EMPH_GAIN	-	7	1	1				
133	V-EMPH_N.L	-	7	3	3				
134	V-EMPH_CORE	-	3	3	3				
135	D RANGE	-	1	0	0				
136	DY_GAIN	MAIN NTSC mode	15	9	9				
137	DC_GAIN	MAIN NTSC mode	15	6	6				
138	VAP_GAIN	MAIN NTSC mode	7	2	2				
139	VAP_INV	MAIN NTSC mode	31	10	10				
140	YH_CORE	MAIN NTSC mode	3	0	0				
141	YHCGAIN	MAIN NTSC mode	1	1	1				
142	CDL	MAIN NTSC mode	7	3	3				
143	YNRK	MAIN NTSC mode	1	1	1				
144	YNRINV	MAIN NTSC mode	1	0	0				
145	YNRLIM	MAIN NTSC mode	3	1	1				
146	CNRK		1	1	1				
147	CNRINV		1	0	0				
148	CNRLIM		3	1	1				
149	YPFG		15	10	10				
150	SEPA_LEVEL	480i/576i	3	2	2				
151	SEPA_LEVEL	480p/576p	3	2	2				
152	SEPA_LEVEL	1080i_50	3	2	2				
153	SEPA_LEVEL	1080i_60/720p	3	2	2				
154	AUTO_FM/AM(D11-D8)	-	15	2	2				
155	AUTO_FM/AM(D7-D0)	-	254	189	189				
156	A2_THRESHOLD(D11-D8)	-	15	0	0				
157	A2_THRESHOLD(D7-D0)	-	254	112	112				
158	PRE_AM	except 4.5MHz(except BIL/STE)	254	17	17				
159	VOL_SCART1 (D15-D8)	-	254	115	115				
160	VOL_SCART1 (D7-D5)	-	7	0	0				
161	PRE_SCART	-	254	31	31				
162	PRE_FM	4.5MHz(JAPAN)	254	34	34				
163	PRE_FM	4.5MHz(except BTSC-SAP)	254	32	32				
164	PRE_FM	4.5MHz(BTSC-SAP)	254	60	60				
165	PRE_FM	4.5MHz(KOREA-except BIL/STE)	254	19	19				
166	PRE_FM	4.5MHz(KOREA-BIL/STE)	254	34	34				
167	PRE_FM	except 4.5MHz(except BIL/STE)	254	17	17				
168	PRE_FM	except 4.5MHz(BIL/STE)	254	27	27				
169	PRE_NICAM	-	254	57	57				
170	Screen Saver -Picture shift amount 0:1pixel 1:2pixels 2:3pixels		2	0	0				
171	Thermal Sensor available 0:NO 1:YES		1	0	0				
172	Video Input Function available 0:NO 1:YES		1	1	1				
173	Screen Saver -Picture Shift direction 0:dia 1:cross 2:up/down 3:left/right		3	0	0				
174	AUDIO Function available 0:NO, 1:YES		1	1	1				
175	Remouto Function available 0:NO, 1:YES		1	1	1				
176	Power Save On/Off Setting at Initialize,Reset and Shipping	0:Change 1: Don't Change	1	0	0				
177	DVI-STB/RGB-COMPONENT Function available 0 :NO, 1:YES		1	0	0				

O: should be adjusted
▲: should be followed previous data

ADJ No.	Adjustment Items (Function)	Mode	Maximum Value	Default 32"	Default 42"	FORMATTER PWB	VIDEO PWB	TUNER PWB	PDP Panel
178	Free								
179	Free								
180	Terminal Mode Function available 0:Not Available, 1:Available	RS232C	1	0	0				
181	Free								
182	AGC_LEVEL AGCL	ALL Mode	3	0	0				
183	TEXT H sync delay	-	127	0	0				
184	TEXT V sync delay	-	127	50	50				
185	TEXT_H_POSITION	-	254	42	42				
186	TEXT_V_POSITION	-	254	38	38				
187	Lower Limits value for Sync Detect of 2ms interval	For AFC at TV mode	254	25	25				
188	Upper Limits Value for Sync Detect of 2ms interval	For AFC at TV mode	254	40	40				
189	Lower Limits value for Sync Detect of 2ms interval	For Free Running at TV mode	254	30	30				
190	Upper Limits Value for Sync Detect of 2ms interval	For Free Running at TV mode	254	45	45				
191	Lower Limits value for Sync Detect of 2ms interval	For AUTO OFF at TV mode	254	25	25				
192	Upper Limits Value for Sync Detect of 2ms interval	For AUTO OFF at TV mode	254	35	35				
193	Lower Limits value for Sync Detect of 2ms interval	For Free Running at AV mode	254	30	30				
194	Upper Limits Value for Sync Detect of 2ms interval	For Free Running at AV mode	254	45	45				
195	Counting time for discrimination of fV (TB1274)	-	31	2	2				
196	Free		1	0	0				
197	Counting time for discrimination of Sync. (M30625/TA1370)	-	31	2	2				
198	Input Source of fV/fH judgment (0:M30625,1:TA1370)	Component Mode	1	0	0				
199	Counting time for discrimination of fV (M30625/TA1370)	-	31	2	2				
200	Y_DL (6.5MHz PAL/NTSC4.43) For Asia	Main	10	7	7				
201	Y_DL (6.5MHz SECAM) For Asia	Main	10	10	10				
202	Y_DL (6.5MHz PAL/NTSC4.43) For Asia	Sub	10	4	4				
203	Y_DL (6.5MHz SECAM) For Asia	Sub	10	10	10				
204	PDP-BLK ON/OFF	1:ON, 0:OFF	1	0	0				
205	Counting time for discrimination of fH (M30625/TA1370)	-	31	2	2				
206	Sharpness f0(L)	Sub	3	2	2				
207	NJW1320_OUT1_GAIN	VIDEO PWB	1	0	0				
208	NJW1320_OUT2_GAIN	VIDEO PWB	1	0	0				
209	Sharpness f0(L')	Sub	3	2	2				
210	AFC_GAIN (Except AV00 mode)	Except AV00 mode	3	0	0				
211	Timer Correction (for error of ceramic-filter osc.freq.)		62	34	34				
212	Brightness Center (CM)	NT2/NT3/HD2/HD3/PAL2/PAL3/HD9/HD10/NT4/PAL4	254	128	128				
213	Brightness Center (CM)	HD1/HD4/HD5/HD6/HD7/HD8	254	124	124				
214	Brightness Center (CM)	MULTI PICTURE/NT1/PAL1	254	128	128				
215	Free								
216	Contrast Center (CM)	TV/VIDEO(AV1/AV4 mode)	254	137	137				
217	Free								
218	Color Center (CM)	NT1/NT2/NT4/HD3/HD4/HD6/PAL4	127	80	80				
219	Color Center (CM)	PAL1/PAL2/HD8/HD9	127	80	80				
220	Color Center (CM)	NT3/HD1/HD2/HD5/PAL3/HD7/HD10	127	80	80				
221	Tint Center (CM)	PAL1	254	118	118				
222	Tint Center (CM)	NT1/NT2/NT4/HD3/HD4/HD6	254	120	120				
223	Tint Center (CM)	PAL2/HD8/HD10/PAL4	254	115	115				
224	Tint Center (CM)	NT3/HD1/HD2/HD5/PAL3/HD7/HD9	254	124	124				
225	Center of Sharpness (HV Enhancer Gain for Y) For Europe	TV	31	19	19				
226	Center of Sharpness (HV Enhancer Gain for Y) For Europe	VIDEO	31	18	18				
227	Center of Sharpness (HV Enhancer Gain for Y) For Europe	HD5/HD6	31	11	11				
228	Center of Sharpness (HV Enhancer Gain for Y) For Europe	HD1/HD4/HD7/HD8	31	7	7				
229	Center of Sharpness (HV Enhancer Gain for Y) For Europe	HD2/HD3/HD9/HD10	31	15	15				
230	Center of Sharpness (HV Enhancer Gain for Y) For Europe	NT2/NT3/PAL2/PAL3/NT4/PAL4	31	15	15				
231	Center of Sharpness (HV Enhancer Gain for Y) For Europe	TEXT(2 picture)	31	7	7				
232	Maximum Value of Contrast at REAL/NORMAL mode		254	188	188				
233	Offset Value of Contrast data at SPLIT mode		120	90	90				
234	Offset value of gain for Black Stretch function	except OFF/LOW/HIGH	63	33	33				
235	Demonstration [White] 0-3:None 4:0 5:+10W 6:+20W 7:+30W	Mode(common)	7	5	5				
236	Demonstration 0:Normal 1:Peak	Mode	1	1	-				
237	Demonstration [Middle] 0:+0W 1:+10W 2:+20W 3:+30W	Mode(common)	3	3	3				
238	Demonstration 0:Normal 1:Peak	Mode	1	-	0				
239	Horizontal Enhance	TEXT	3	3	3				
240	YNR Input Level at Low level for DVI-STV Mode	1080i-60/1080i-50/720p-60	7	2	2				
241	YNR Input Level at Low level for DVI-STV Mode	480i/480p/576i/576p/VGA	7	2	2				
242	CNR Input Level at Low level for DVI-STV Mode	1080i-60/1080i-50/720p-60	7	2	2				
243	CNR Input Level at Low level for DVI-STV Mode	480i/480p/576i/576p/VGA	7	2	2				
244	Vertical Enhance	TEXT	3	3	3				
245	Demonstration Mode 0:off 1:on		1	0	0				
246	Free								
247	Free								
248	HV Enhancer Gain for C	TEXT	31	0	0				
249	YNR(NR) Input Level	RF Mode	7	1	1				
250	YNR Input Level at Low level for AV1-4 Mode	VIDEO	7	3	3				
251	YNR Input Level at Low level for AV1-4 Mode	NT2/NT3/PAL2/PAL3/NT4/PAL4	7	3	3				
252	YNR Input Level at Low level for AV1-4 Mode	HD1/HD4/HD5/HD6/HD7/HD8	7	3	3				
253	YNR Input Level at Low level for AV1-4 Mode	HD2/HD3/HD9/HD10	7	3	3				
254	CNR Input Level at Low level for AV1-4 Mode	VIDEO	7	3	3				
255	CNR Input Level at Low level for AV1-4 Mode	NT2/NT3/PAL2/PAL3/NT4/PAL4	7	3	3				
256	CNR Input Level at Low level for AV1-4 Mode	HD1/HD4/HD5/HD6/HD7/HD8	7	3	3				
257	CNR Input Level at Low level for AV1-4 Mode	HD2/HD3/HD9/HD10	7	3	3				
258	Heat APC function available 0:NO, 1: YES		1	1	1				
259	Gamma SW (0:1.0 1:2.2 2:2.8)	TV/VIDEO	2	1	1				
260	Gamma SW (0:1.0 1:2.2 2:2.8)	DVI-PC/DVI-STB-DSUB-RGB	2	1	1				
261	Select for APC function		1	0	0				
262	"CCFMD" function	TV/VIDEO	1	0	0				
263	"CCFMD" function	DVI-PC/DVI-STB-DSUB-RGB	1	0	0				
264	NTSC/EBU(CCFORM)	NT1/NT2/HD3/HD4/HD6/HD8/HD10/PAL1/PAL2	1	0	0				
265	NTSC/EBU(CCFORM)	TV/VIDEO/NT3/PAL3/HD1/HD2/HD5/HD7/HD9/NT4/PAL4	1	0	0				
266	NTSC/EBU(CCFORM)	DVI-PC/DVI-STB/DSUB-RGB	1	0	0				

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32PD5000/42PD5000 (PW1)

O: should be adjusted
▲: should be followed previous data

ADJ No.	Adjustment Items	Mode	Maximum Value	Default 32"	Default 42"	FORMATTER PWB	VIDEO PWB	TUNER PWB	PDP Panel
267	Correction for Tracking (DCBON)	TV/VIDEO-Color Temp. : COOL	1	0	0				
268	Correction for Tracking (DCBON)	TV/AV-Col. Temp. : Nor/War	1	1	1				
269	Correction for Tracking (DCBON)	DVI-PC/DVI-STB/DSUB-RGB	1	1	1				
270	Color Temp. Correction		3	0	0				
271	Typical Value of Contrast OSD	DYNAMIC	31	31	31				
272	PC Power Save function (0:Impossible 1:Possible)		1	1	1				
273	Waite Time for POWER SAVE function (s)	VIDEO/PC	254	15	15				
274	Lower Limits value for Sync Detect of 2ms interval	For Power Save at AV mode	254	5	5				
275	Upper Limits Value for Sync Detect of 2ms interval	For Power Save at AV mode	254	200	200				
276	Horizontal Position of OSD	60Hz	15	7	7				
277	Vertical Position of OSD	60Hz	15	7	7				
278	PinP Function 0:PinP, 1:Infomation1, 2:Infomaiton Split		2	0	0				
279	Select for WIDE Mode		1	1	1				
280	Temperature for FAN Restart (Temp_High)		254	58	58				
281	Temperature for FAN Stop (Temp Low)		254	55	55				
282	Internal Temperature Display °C		125	-	-				
283	PDP micom Version Display		255	-	-				
284	Total Operating Hours of PDP panel		65535	-	-				
285	Initialize function 0:Keep data, 1:Initialize	No.0~No.23,30~33,42~45,289,293,294Adj No.701~703,	1	0	0				
286	L standard PLL gating HIGH [Europe model]		1	0	0				
287	Select for APC output [Except Europe model]	Main FE	2	1	1				
288	Other New function (Shin Doga mode) 0:Off, 1:On	50Hz	1	0	0				
289	AGC adjustment (MFE) [Except Europe model]	MAIN	63	50	50	▲		O	
290	AGC adjustment (MFE) [Europe model]	MAIN	63	20	20				
291	AGC INPUT(MFE)	MAIN	-	-	-				
292	Other New function (Shin Doga mode) 0:Off, 1:On	70Hz(PC)	1	0	0				
293	SUB CONTRAST AV2	MAIN/SUB COMPOSITE mode	15	8	8				
294	SUB CONTRAST AV3	MAIN/SUB COMPOSITE mode	15	8	8				
295	Contrast Center (CM)	AV2	254	137	137				
296	Contrast Center (CM)	AV1	254	137	137				
297	Brightness center (CM) offset	AV2	254	127	127				
298	Brightness center (CM) offset	AV1	254	127	127				
299	Other New function (Shin Doga mode) 0:Off, 1:On	60Hz	1	1	1				
300	3D ON/OFF 0:ON,1:OFF(Through)		1	0	0				
301	Input Select of TA1370 0:HD1/VD1,1:HD3/VD3	Main/Sub	1	0	0				
302	Sharpness Gain(RF/NR)	Main/Sub	15	3	3				
303	3Line Y/C Main- Sub SW	0:Main, 1: Sub	1	0	0				
304	Offset Value(+/-) of Upper Limit (for TB1274:SUB-CONT)	Single Picture mode	18	2	2				
305	Offset Value(+/-) of Upper Limit (for FC :RGB-AMP)	Multi Picture mode	18	2	2				
306	Reference Amplitude(RGB AMP)	Multi Picture mode	254	127	127				
307	Component Frq.(fH) Setup (0:28/31/33/45KHz,1:28/31/45KHz)		1	0	0				
308	Terget value of White peak Adj.	Single Picture mode	237	235	235				
309	Sharpness Gain(S VIDEO)	Main	15	7	7				
310	Sharpness Gain(S VIDEO)	Sub	15	7	7				
311	Select color control (0: Asia, 1: South America)	Main/Sub	1	0	0				
312	Sharpness Gain Main(N-PAL)		15	8	8				
313	Sharpness f0 Main(N-PAL)		3	2	2				
314	Sharpness Gain Sub (N-PAL)		15	9	9				
315	Sharpness f0 Sub (N-PAL)		3	2	2				
316	Delay Time ON/OFF for Lipsync circuit 0:Off, 1:On		1	1	1				
317	Sync Mode SW		7	0	0				
318	Set Sound System at Auto mode of Sound Sys. (0:auto,1:4.5MHz)	Main/Sub	1	0	0				
319	Power Restart by cancelling reset from Power Save Mode in PC input	0:keep last condition 1:restart	1	0	0				
320	Change Europe Model for Destination of North America (OSD, Wide Mode etc.) available	0:NO 1:YES(DAY/NIGHT etc.)	1	0	0				
321	Count Souce for ON/OFF Timer	0:MCU-250ms, 1:AC-50/60Hz	1	0	0				
322	Wide Mode Selection for Europe (Normal: 5 modes, For Service: 10 modes)	0:Normal 1:For Service	1	0	0				
323	Forced AVC type available	0:Normal type , 1: Forced AVC type	1	0	0				
324	Sharpness Gain Main(M-PAL)		15	8	8				
325	Sharpness f0 Main(M-PAL)		3	2	2				
326	Sharpness Gain Sub (M-PAL)		15	9	9				
327	Sharpness f0 Sub (M-PAL)		3	2	2				
328	CNR Input Level at Low level for Dsub Comp. Mode	NT2/NT3/PAL2/PAL3/NT4/PAL4	7	2	2				
329	CNR Input Level at Low level for Dsub Comp. Mode	HD1/HD4/HD5/HD6/HD7/HD8	7	2	2				
330	CNR Input Level at Low level for Dsub Comp. Mode	HD2/HD3/HD9/HD10	7	2	2				
331	Sharpness Gain(VIDEO) NTSC3.58	MAIN	15	9	9				
332	Sharpness f0(VIDEO) NTSC3.58	MAIN	3	2	2				
333	Sharpness Gain(VIDEO) NTSC3.58	SUB	15	8	8				
334	Sharpness f0(VIDEO) NTSC3.58	SUB	3	2	2				
335	Sharpness Gain(VIDEO) SECAM,B/W	MAIN	15	10	10				
336	Sharpness f0(VIDEO) SECAM,B/W	MAIN	3	2	2				
337	Sharpness Gain(VIDEO) SECAM,B/W	SUB	15	8	8				
338	Sharpness f0(VIDEO) SECAM,B/W	SUB	3	2	2				
339	Sharpness Gain(VIDEO) NTSC4.43	MAIN	15	9	9				
340	Sharpness f0(VIDEO) NTSC4.43	MAIN	3	2	2				
341	Sharpness Gain(VIDEO) NTSC4.43	SUB	15	8	8				
342	Sharpness f0(VIDEO) NTSC4.43	SUB	3	2	2				
343	Brightness Limitted Function of PANEL [APSON]		1	1	1				
344	VsVa WAIT TIMER [RISTIM]		15	5	5				
345	CONTRAST initial value	Panel Life -Extend1	127	93	93				
346	Correcting Time Interval	Panel Life -Extend1	127	10	10				
347	CONTRAST additional value	Panel Life -Extend1	127	1	1				
348	CONTRAST initial value	Panel Life -Extend2	127	63	63				
349	Correcting Time Interval	Panel Life -Extend2	127	6	6				
350	CONTRAST additional value	Panel Life -Extend2	127	1	1				
351	L_PLL.GAIN		1	0	0				
352	Free								
353	Free								
354	Free								
355	Free								

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O: should be adjusted
▲: should be followed previous data

ADJ. No.	Adjustment Items	Mode	Maximum Value	Default 32"	Default 42"	FORMATTER PWB	VIDEO PWB	TUNER PWB	PDP Panel
356	SEPA_LEVEL_DSUB	480i/576i	3	2	2				
357	SEPA_LEVEL_DSUB	480p/576p	3	2	2				
358	SEPA_LEVEL_DSUB	1080i_50	3	2	2				
359	SEPA_LEVEL_DSUB	1080i_60/720p	3	2	2				
360	HD-PHASE_DSUB	480i/576i	63	20	20				
361	HD-PHASE_DSUB	480p/576p	63	20	20				
362	HD-PHASE_DSUB	1080i_50	63	20	20				
363	HD-PHASE_DSUB	1080i_60/720p	63	20	20				
364	Y_DL (L)	MAIN	10	4	4				
365	Y_DL (L')	MAIN	10	4	4				
366	Y_DL (L)	Sub	10	1	1				
367	Y_DL (L')	Sub	10	1	1				
368	Sharpness Gain(L)	MAIN	15	10	10				
369	Sharpness Gain(L')	MAIN	15	10	10				
370	Sharpness Gain(L)	SUB	15	8	8				
371	Sharpness Gain(L')	SUB	15	8	8				
372	Sharpness f0(L)	MAIN	3	2	2				
373	Sharpness f0(L')	MAIN	3	2	2				
374	BURN-IN enable/ disenable	0:Disenable, 1:Enable	1	1	1				
375	BURN-IN mode		2	2	2				
376	CM_THRESHOLD (D15-D8)	-	254	0	0				
377	CM_THRESHOLD (D7 -D0)	-	254	36	36				
378	Sharpness Gain(RF M)	MAIN	15	11	11				
379	Sharpness Gain(RF M)	Sub	15	11	11				
380	Sharpness f0 (RF M)	Main	3	2	2				
381	Sharpness f0 (RF M)	SUB	3	2	2				
382	Counting Value of 2ms Sync.Detect	MAIN	-	-	-				
383	Counting Value of 2ms Sync.Detect	SUB	-	-	-				
384	TB1274 Read Data(00h)	Main	-	-	-				
385	TB1274 Read Data(01h)	Main	-	-	-				
386	TB1274 Read Data(00h)	Sub	-	-	-				
387	TB1274 Read Data(01h)	Sub	-	-	-				
388	MSP Read Data (CNTROL) (D15-D8)		-	-	-				
389	MSP Read Data (CNTROL) (D7 -D0)		-	-	-				
390	MSP Read Data (STANDARD_RES) (D15-D8)		-	-	-				
391	MSP Read Data (STANDARD_RES) (D7 -D0)		-	-	-				
392	MSP Read Data (STATUS) (D15-D8)		-	-	-				
393	MSP Read Data (STATUS) (D7 -D0)		-	-	-				
394	TA1370G Read Data(00h)	VIDEO PWB	-	-	-				
395	TA1370G Read Data(01h)	VIDEO PWB	-	-	-				
396	TA1370G Read Data(00h)	FORMATTER PWB	-	-	-				
397	TA1370G Read Data(01h)	FORMATTER PWB	-	-	-				
398	uPD64084 Read Data(00H)		-	-	-				
399	uPD64084 Read Data(01H)		-	-	-				
400	Language (Refer to below)		6	0	0				
401	Hotel Mode(0:No,1:Yes)		1	0	0				
402	Analog Data (0:Keep EEPROM,1:Not Keep to EEPROM)		1	0	0				
403	Maximum Volume Limit		63	63	63				
404	Power Mode(0:Last mode, 1:Pos1, 2:V1, 3:V2, 4:V3, 5:V4)		5	0	0				
405	Channel Select(0:CCIR, 1:CHINA)		1	0	0				
406	Auto_sound 4.5 (0:Korea, 1:BTSC, 2:Japan)		2	0	0				
407	T/TEXT(0: None, 1:Yes)		1	1	1				
408	TEXT Language		7	0	0				
409	IIC BUS Data/Clock Open(0:Close, 1:Open)		1	0	0				
410	Channel Preset(0:VESTEL, 1:GIFU, 2:HAMA, 3:HFDM,4:AUSTRALIA)		4	1	1				
411	Detect and Display Tele-Cinema (0:normal 1:Tele-Cinema)		-	-	-				
412	V FREQ 60Hz Force (0:None, 1:Yes)	Main/Sub	1	0	0				
413	COLOR SYSTEM CONTROL-MODE(0:BW, 2:3.58NTSC, 3:4.43NTSC, ···)	Main	-	-	-				
414	COLOR SYSTEM CONTROL-MODE(0:BW, 2:3.58NTSC, 3:4.43NTSC, ···)	Sub	-	-	-				
415	Horizontal Filter SW [HHPF0]	NTSC	1	0	0				
416	Enhancer Gain [HHPF1]	PAL	1	0	0				
417	Enhancer Gain [HHPF2]	HD	1	0	0				
418	Horizontal Coring Level (Enhancer Gain) AS[HECOR0_PO]	NT1-RF	15	-	1				
419	Horizontal Coring Level (Enhancer Gain) AS[HECOR1_PO]	PAL1-RF / Multi picture	15	-	1				
420	Horizontal Coring Level (Enhancer Gain) [HECOR2_PO]	NT1-Video	15	-	1				
421	Horizontal Coring Level (Enhancer Gain) [HECOR3_PO]	PAL1-Video	15	-	1				
422	Horizontal Coring Level (Enhancer Gain) [HECOR4_PO]	NT2/NT3/NT4/PAL2/PAL3/PAL4	15	-	1				
423	Horizontal Coring Level (Enhancer Gain) [HECOR5_PO]	HD2/HD3/HD9/HD10	15	-	1				
424	Horizontal Coring Level (Enhancer Gain) [HECOR6_PO]	HD1/HD4/HD5/HD6/HD7/HD8	15	-	0				
425	Horizontal Coring Level (Enhancer Gain) [HECORPC_PO]	PC	15	-	1				
426	Horizontal Coring Level (Enhancer Gain) EU[HECORE_PO]	PAL1-RF / Multi picture	15	-	1				
427	Vertical Coring Level (Enhancer Gain) AS[VECOR0_PO]	NT1-RF	15	-	1				
428	Vertical Coring Level (Enhancer Gain) AS[VECOR1_PO]	PAL1-RF / Multi picture	15	-	1				
429	Vertical Coring Level (Enhancer Gain) [VECOR2_PO]	NT1-Video	15	-	1				
430	Vertical Coring Level (Enhancer Gain) [VECOR3_PO]	PAL1-Video	15	-	1				
431	Vertical Coring Level (Enhancer Gain) [VECOR4_PO]	NT2/NT3/NT4/PAL2/PAL3/PAL4	15	-	0				
432	Vertical Coring Level (Enhancer Gain) [VECOR5_PO]	HD2/HD3/HD9/HD10	15	-	0				
433	Vertical Coring Level (Enhancer Gain) [VECOR6_PO]	HD1/HD4/HD5/HD6/HD7/HD8	15	-	0				
434	Vertical Coring Level (Enhancer Gain) [VECORPC_PO]	PC	15	-	0				
435	Vertical Coring Level (Enhancer Gain) EU[VECORE_PO]	PAL1-RF / Multi picture	15	-	0				
436	Horizontal Coring Level (Enhancer Gain) AS[HECOR0_P1]	NT1-RF	15	1	-				
437	Horizontal Coring Level (Enhancer Gain) AS[HECOR0_P2]	PAL1-RF / Multi picture	15	1	-				
438	Horizontal Coring Level (Enhancer Gain) [HECOR0_P3]	NT1-Video	15	1	-				
439	Horizontal Coring Level (Enhancer Gain) [HECOR0_P4]	PAL1-Video	15	1	-				
440	Horizontal Coring Level (Enhancer Gain) [HECOR0_P5]	NT2/NT3/NT4/PAL2/PAL3/PAL4	15	1	-				
441	Horizontal Coring Level (Enhancer Gain) [HECOR0_P6]	HD2/HD3/HD9/HD10	15	1	-				
442	Horizontal Coring Level (Enhancer Gain) [HECOR0_P7]	HD1/HD4/HD5/HD6/HD7/HD8	15	0	-				
443	Horizontal Coring Level (Enhancer Gain) [HECORPC_P1]	PC	15	1	-				
444	Horizontal Coring Level (Enhancer Gain) EU[HECORE_P1]	PAL1-RF / Multi picture	15	1	-				

O: should be adjusted
▲: should be followed previous data

ADJ. No.	Function / Adjustment Items	Mode	Maximum Value	Default 32"	Default 42"	FORMATTER PWB	VIDEO PWB	TUNER PWB	PDP Panel
445	Vertical Coring Level (Enhancer Gain) AS[VECOR0_P1]	NT1-RF	15	1	-				
446	Vertical Coring Level (Enhancer Gain) AS[VECOR0_P2]	PAL1-RF / Multi picture	15	1	-				
447	Vertical Coring Level (Enhancer Gain) [VECOR0_P3]	NT1-Video	15	1	-				
448	Vertical Coring Level (Enhancer Gain) [VECOR0_P4]	PAL1-Video	15	1	-				
449	Vertical Coring Level (Enhancer Gain) [VECOR0_P5]	NT2/NT3/NT4/PAL2/PAL3/PAL4	15	0	-				
450	Vertical Coring Level (Enhancer Gain) [VECOR0_P6]	HD2/HD3/HD9/HD10	15	0	-				
451	Vertical Coring Level (Enhancer Gain) [VECOR0_P7]	HD1/HD4/HD5/HD6/HD7/HD8	15	0	-				
452	Vertical Coring Level (Enhancer Gain) [VECORPC_P1]	PC	15	0	-				
453	Vertical Coring Level (Enhancer Gain) EU[VECORE_P1]	PAL1-RF / Multi picture	15	0	-				
454	YFRNR Input Gain (Main) 2 pictures [MYNRG0]	HD-except HD	7	1	1				
455	<HD-NTSC,HD-PAL(Sub) [MYNRG1]	HD-HD	7	4	4				
456	4 pictures [MYNRG2]	NT-*/PAL-*	7	1	1				
457	[MYNRG3]	HD-*	7	4	4				
458	YFRNR Input Gain (Sub) [YCNRG0]	2 pictures	7	4	4				
459	[YCNRG1]	4pictures/12pictures	7	1	1				
460	CFRNR Input Gain (Main) 2 pictures [MCNRG0]	HD-except HD	7	3	3				
461	<HD-NTSC,HD-PAL(Sub) [MCNRG1]	HD-HD	7	4	4				
462	[MCNRG2]	NT-*/PAL-*	7	4	4				
463	[MCNRG3]	HD-*	7	4	4				
464	CFRNR Input Gain (Sub) [SCNRG0]	2 pictures	7	3	3				
465	[SCNRG1]	4pictures/12pictures	7	4	4				
466	YFRNR Transition Level (Main/Sub) [MYNRP0]	NT1/ PAL1 / Multi picture	7	0	0				
467	[MYNRP5]	NT1/PAL1-Video	7	0	0				
468	[MYNRP6]	NT2/NT3/NT4/PAL2/PAL3/PAL4	7	0	0				
469	[MYNRP7]	HD2/HD3/HD9/HD10	7	0	0				
470	[MYNRP8]	HD1/HD4/HD5/HD6/HD7/HD8	7	0	0				
471	CFRNR Transition Level (Main/Sub) [MCNRP0]	NT1/ PAL1 / Multi picture	7	2	2				
472	[MCNRP5]	NT1/PAL1-Video	7	2	2				
473	[MCNRP6]	NT2/NT3/NT4/PAL2/PAL3/PAL4	7	2	2				
474	[MCNRP7]	HD2/HD3/HD9/HD10	7	2	2				
475	[MCNRP8]	HD1/HD4/HD5/HD6/HD7/HD8	7	0	0				
476	Vertical Enhancer Gain for Y/G [YVEG0_P0]	NTSC/PAL(-except RF)	15	-	8				
477	[YVEG1_P0]	HD2/HD3/HD9/HD10	15	-	12				
478	[YVEG2_P0]	HD1/HD4/HD5/HD6/HD7/HD8	15	-	8				
479	AS[YVEG3_P0]	PAL1-RF / Multi picture	15	-	8				
480	EU[YVEG0_E_P0]	PAL1-RF / Multi picture	15	-	8				
481	Vertical DSB Gain For Y/G [YVDSBG0_P0]	NTSC/ PAL / Multi picture	3	-	0				
482	[YVDSBG1_P0]	HD2/HD3/HD9/HD10	3	-	0				
483	[YVDSBG2_P0]	HD1/HD4/HD5/HD6/HD7/HD8	3	-	0				
484	Vertical DSB Coring for Y/G [YVDSBG0_P0]	NTSC/ PAL / Multi picture	7	-	0				
485	[YVDSBG1_P0]	HD	7	-	3				
486	Vertical Enhancer Clip for Y/G 0:LTI [YVECLP0_P0]	NTSC/ PAL / Multi picture	1	-	1				
487	[YVECLP1_P0]	HD	1	-	1				
488	Vertical Clip Offset Level [YVECLP0_P0]	NTSC/ PAL / Multi picture	15	-	7				
489	[YVECLP1_P0]	HD	15	-	1				
490	Vertical Non Linear Peaking for Y/G [YVNLP0_P0]	NTSC/ PAL / Multi picture	63	-	0				
491	[YVNLP1_P0]	HD	63	-	0				
492	Horizontal HPF Peak Freq. SW for Y/G [YHHPF0_P0]	NTSC/ PAL / Multi picture	3	-	2				
493	[YHHPF1_P0]	HD2/HD3/HD9/HD10	3	-	1				
494	[YHHPF2_P0]	HD1/HD4/HD5/HD6/HD7/HD8	3	-	1				
495	Horizontal Enhancer Gain for Y/G [YHEG0_P0]	NTSC/PAL(-except RF)	15	-	15				
496	[YHEG1_P0]	HD2/HD3/HD9/HD10	15	-	15				
497	[YHEG2_P0]	HD1/HD4/HD5/HD6/HD7/HD8	15	-	0				
498	AS[YHEG3_P0]	PAL1-RF / Multi picture	15	-	15				
499	EU[YHEG0_E_P0]	PAL1-RF / Multi picture	15	-	15				
500	Horizontal DSB Gain For Y/G [YHDSBG0_P0]	NTSC/ PAL / Multi picture	3	-	2				
501	[YHDSBG1_P0]	HD2/HD3/HD9/HD10	3	-	0				
502	[YHDSBG2_P0]	HD1/HD4/HD5/HD6/HD7/HD8	3	-	0				
503	Horizontal DSB Coring for Y/G [YHDSBC0_P0]	NTSC/ PAL / Multi picture	7	-	4				
504	[YHDSBC1_P0]	HD	7	-	0				
505	Horizontal Enhancer Clip for Y/G 0:LTI [YHECLP0_P0]	NTSC/ PAL / Multi picture	1	-	0				
506	[YHECLP1_P0]	HD	1	-	0				
507	Horizontal Clip Offset Level for Y/G AS[YHECLPL0_P0]	RF / Multi picture	15	-	2				
508	AS[YHECLPL1_P0]	NT1-except RF / PAL1-except RF	15	-	2				
509	[YHECLPL2_P0]	HD	15	-	1				
510	EU[YHECLPL0_E_P0]	RF / Multi picture	15	-	4				
511	EU[YHECLPL1_E_P0]	NT1-except RF / PAL1-except RF	15	-	4				
512	Horizontal Non Linear Peaking for Y/G [YHNLP0_P0]	NTSC/ PAL / Multi picture	63	-	0				
513	[YHNLP1_P0]	HD	63	-	0				
514	Coring Amplitude for Y/G [YCOR0_PO]	NT1-RF/ PAL1-RF / Multi picture	7	-	7				
515	[YCOR1_PO]	NT1-Video / PAL1-Video	7	-	5				
516	[YCOR2_PO]	NT2/NT3/NT4/PAL2/PAL3/PAL4	7	-	3				
517	[YCOR3_PO]	HD2/HD3/HD9/HD10	7	-	1				
518	[YCOR4_PO]	HD1/HD4/HD5/HD6/HD7/HD8	7	-	1				
519	Vertical Enhancer Gain for Y/G [YVEG0_P1]	NTSC/PAL(-except RF)	15	8	-				
520	[YVEG1_P1]	HD2/HD3/HD9/HD10	15	12	-				
521	[YVEG2_P1]	HD1/HD4/HD5/HD6/HD7/HD8	15	8	-				
522	AS[YVEG3_P1]	PAL1-RF / Multi picture	15	8	-				
523	EU[YVEG0_E_P1]	PAL1-RF / Multi picture	15	8	-				
524	Vertical DSB Gain for Y/G [YVDSBG0_P1]	NTSC/ PAL / Multi picture	3	0	-				
525	[YVDSBG1_P1]	HD2/HD3/HD9/HD10	3	0	-				
526	[YVDSBG2_P1]	HD1/HD4/HD5/HD6/HD7/HD8	3	0	-				
527	Vertical DSB Coring for Y/G [YVDSBC0_P1]	NTSC/ PAL / Multi picture	7	0	-				
528	[YVDSBC1_P1]	HD	7	3	-				
529	Vertical Enhancer Clip for Y/G 0:LTI [YVECLP0_P1]	NTSC/ PAL / Multi picture	1	1	-				
530	[YVECLP1_P1]	HD	1	1	-				
531	Vertical Clip Offset Level for Y/G [YVECLP0_P1]	NTSC/ PAL / Multi picture	15	7	-				
532	[YVECLP1_P1]	HD	15	1	-				
533	Vertical Non Linear Peaking for Y/G [YVNLP0_P1]	NTSC/ PAL / Multi picture	63	0	-				

O: should be adjusted
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ADJ. No.	Function — Adjustment Items	Mode	Maximum Value	Default 32"	Default 42"	FORMATTER PWB	VIDEO PWB	TUNER PWB	PDP Panel
534	[YVNLP1_P1]	HD	63	0	-				
535	Horizontal HPF Peak Freq. SW for Y/G [YHHPF0_P1]	NTSC/ PAL / Multi picture	3	2	-				
536	[YHHPF1_P1]	HD2/HD3/HD9/HD10	3	1	-				
537	[YHHPF2_P1]	HD1/HD4/HD5/HD6/HD7/HD8	3	1	-				
538	Horizontal Enhancer Gain for Y/G [YHEG0_P1]	NTSC/PAL(-except RF)	15	15	-				
539	[YHEG1_P1]	HD2/HD3/HD9/HD10	15	15	-				
540	[YHEG2_P1]	HD1/HD4/HD5/HD6/HD7/HD8	15	15	-				
541	AS[YHEG3_P1]	PAL1-RF / Multi picture	15	15	-				
542	EU[YHEG0_E_P1]	PAL1-RF / Multi picture	15	15	-				
543	Horizontal DSB Gain for Y/G [YHDSBG0_P1]	NTSC/ PAL / Multi picture	3	2	-				
544	[YHDSBG1_P1]	HD2/HD3/HD9/HD10	3	0	-				
545	[YHDSBG2_P1]	HD1/HD4/HD5/HD6/HD7/HD8	3	0	-				
546	Horizontal DSB Coring for Y/G [YHDSBC0_P1]	NTSC/ PAL / Multi picture	7	7	-				
547	[YHDSBC1_P1]	HD	7	0	-				
548	Horizontal Enhancer Clip for Y/G 0:LTI [YHDSBC0_P1]	NTSC/ PAL / Multi picture	1	0	-				
549	[YHDSBC1_P1]	HD	1	0	-				
550	Horizontal Clip Offset Level for Y/G AS[YHCLPL0_P1]	RF / Multi picture	15	1	-				
551	AS[YHCLPL1_P1]	NT1-except RF/PAL1-except RF	15	1	-				
552	[YHECLPL2_P1]	HD	15	0	-				
553	EU[YHECLPL0_E_P1]	RF / Multi picture	15	4	-				
554	EU[YHECLPL1_E_P1]	NT1-except RF/PAL1-except RF	15	4	-				
555	Horizontal Non Linear Peaking for Y/G [YHNLP0_P1]	NTSC/ PAL / Multi picture	63	0	-				
556	[YHNLP1_P1]	HD	63	0	-				
557	Coring Amplitude for Y/G [YC0R0_P1]	NT1-RF/PAL1-RF / Multi picture	7	7	-				
558	[YC0R1_P1]	NT1-Video/PAL1-Video	7	5	-				
559	[YC0R2_P1]	NT2/NT3/NT4/PAL2/PAL3/PAL4	7	3	-				
560	[YC0R3_P1]	HD2/HD3/HD9/HD10	7	1	-				
561	[YC0R4_P1]	HD1/HD4/HD5/HD6/HD7/HD8	7	1	-				
562	Vertical Enhancer Gain for B-Y/B, R-Y/R [CVEG0]	NTSC/ PAL / Multi picture	15	15	15				
563	[CVEG1]	HD	15	9	9				
564	Vertical DSB Gain for B-Y/B, R-Y/R [CVDSBG0]	NTSC/ PAL / Multi picture	3	0	0				
565	[CVDSBG1]	HD	3	0	0				
566	Vertical DSB Coring for B-Y/B, R-Y/R [CVDSBC0]	NTSC/ PAL / Multi picture	7	0	0				
567	[CVDSBC1]	HD	7	0	0				
568	Vertical Enhancer Clip for B-Y/B, R-Y/R 0:CTI [CVECLP0]	NTSC/ PAL / Multi picture	1	0	0				
569	[CVECLP1]	HD	1	0	0				
570	Horizontal HPF Peak Freq. SW for B-Y/B, R-Y/R [CHHPF0]	NTSC/ PAL / Multi picture	3	2	2				
571	[CHHPF1]	HD	3	2	2				
572	Horizontal Enhancer Gain for B-Y/B, R-Y/R [CHEG0]	NTSC/ PAL / Multi picture	15	15	15				
573	[CHEG1]	HD	15	9	9				
574	Horizontal DSB Gain for B-Y/B, R-Y/R [CHDSBG0]	NTSC/ PAL / Multi picture	3	0	0				
575	[CHDSBG1]	HD	3	0	0				
576	Horizontal DSB Coring for B-Y/B, R-Y/R [CHDSBC0]	NTSC/ PAL / Multi picture	7	0	0				
577	[CHDSBC1]	HD	7	0	0				
578	Horizontal Enhancer Clip for B-Y/B, R-Y/R 0:CTI [CHECLP0]	NTSC/ PAL / Multi picture	1	0	0				
579	[CHECLP1]	HD	1	0	0				
580	Coring Amplitude for B-Y/B, R-Y/R [CC0R0]	NTSC/ PAL / Multi picture	7	1	1				
581	[CC0R1]	HD	7	1	1				
582	B-Y Clamp offset [Except D Sub Component]	NT1/2/3,HD2/3,PAL1/2/3,HD9/10	255	128	128				
583	R-Y Clamp offset [Except D Sub Component]	NT1/2/3,HD2/3,PAL1/2/3,HD9/10	255	128	128				
584	B-Y Clamp offset [Except D Sub Component]	HD1/4,HD7/8	255	128	128				
585	R-Y Clamp offset [Except D Sub Component]	HD1/4,HD7/8	255	128	128				
586	B-Y Clamp offset [Except D Sub Component]	HD5/6	255	128	128				
587	R-Y Clamp offset [Except D Sub Component]	HD5/6	255	128	128				
588	B-Y Clamp offset [D Sub Component]	NT1/2/3,HD2/3,PAL1/2/3,HD9/10	255	128	128				
589	R-Y Clamp offset [D Sub Component]	NT1/2/3,HD2/3,PAL1/2/3,HD9/10	255	128	128				
590	B-Y Clamp offset [D Sub Component]	HD1/4,HD7/8	255	128	128				
591	R-Y Clamp offset [D Sub Component]	HD1/4,HD7/8	255	128	128				
592	B-Y Clamp offset [D Sub Component]	HD5/6	255	128	128				
593	R-Y Clamp offset [D Sub Component]	HD5/6	255	128	128				
594	B-Y Clamp offset [DVI-STB]	480i/576i/480p/576p/VGA	255	128	128				
595	R-Y Clamp offset [DVI-STB]	480i/576i/480p/576p/VGA	255	128	128				
596	B-Y Clamp offset [DVI-STB]	1080i-50/1080i-60	255	128	128				
597	R-Y Clamp offset [DVI-STB]	1080i-50/1080i-60	255	128	128				
598	B-Y Clamp offset [DVI-STB]	720p-60	255	128	128				
599	R-Y Clamp offset [DVI-STB]	720p-60	255	128	128				
600	Y OUT LEVEL M (4.5) For Asia	Main	63	15	15				
601	Y OUT LEVEL B/G (5.5) For Asia	Main	63	13	13				
602	Y OUT LEVEL D/K (6.5) For Asia	Main	63	16	16				
603	Y OUT LEVEL I (6.0) For Asia	Main	63	14	14				
604	Y OUT LEVEL B/G (5.5) For Europe	Main	63	13	13				
605	Y OUT LEVEL D/K (6.5) For Europe	Main	63	16	16				
606	Y OUT LEVEL I (6.0) For Europe	Main	63	19	19				
607	Y OUT LEVEL L (6.5) For Europe	Main	63	13	13				
608	Y OUT LEVEL L' (6.1) For Europe	Main	63	12	12				
609	Y OUT LEVEL M (4.5) For US	Main	63	13	13				
610	C OUT LEVEL M (4.5) For Asia	Main	63	13	13				
611	C OUT LEVEL B/G (5.5) For Asia	Main	63	13	13				
612	C OUT LEVEL D/K (6.5) For Asia	Main	63	13	13				
613	C OUT LEVEL I (6.0) For Asia	Main	63	13	13				
614	C OUT LEVEL B/G (5.5) For Europe	Main	63	8	8				
615	C OUT LEVEL D/K (6.5) For Europe	Main	63	8	8				
616	C OUT LEVEL I (6.0) For Europe	Main	63	3	3				
617	C OUT LEVEL L (6.5) For Europe	Main	63	8	8				
618	C OUT LEVEL L' (6.1) For Europe	Main	63	8	8				
619	C OUT LEVEL M (4.5) For US	Main	63	13	13				
620	Y OUT LEVEL M (4.5) For Asia	Sub	63	14	14				
621	Y OUT LEVEL B/G (5.5) For Asia	Sub	63	13	13				
622	Y OUT LEVEL D/K (6.5) For Asia	Sub	63	15	15				

O: should be adjusted
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ADJ. No.	Adjustment Items (Function)	Mode	Maximum Value	Default 32"	Default 42"	FORMATTER PWB	VIDEO PWB	TUNER PWB	PDP Panel
623	Y OUT LEVEL I (6.0) For Asia	Sub	63	13	13				
624	Y OUT LEVEL B/G (5.5) For Europe	Sub	63	13	13				
625	Y OUT LEVEL D/K (6.5) For Europe	Sub	63	16	16				
626	Y OUT LEVEL I (6.0) For Europe	Sub	63	20	20				
627	Y OUT LEVEL L (6.5) For Europe	Sub	63	13	13				
628	Y OUT LEVEL L' (6.1) For Europe	Sub	63	13	13				
629	Y OUT LEVEL M (4.5) For US	Sub	63	13	13				
630	C OUT LEVEL M (4.5) For Asia	Sub	63	13	13				
631	C OUT LEVEL B/G (5.5) For Asia	Sub	63	13	13				
632	C OUT LEVEL D/K (6.5) For Asia	Sub	63	13	13				
633	C OUT LEVEL I (6.0) For Asia	Sub	63	13	13				
634	C OUT LEVEL B/G (5.5) For Europe	Sub	63	13	13				
635	C OUT LEVEL D/K (6.5) For Europe	Sub	63	13	13				
636	C OUT LEVEL I (6.0) For Europe	Sub	63	13	13				
637	C OUT LEVEL L (6.5) For Europe	Sub	63	13	13				
638	C OUT LEVEL L' (6.1) For Europe	Sub	63	13	13				
639	C OUT LEVEL M (4.5) For US	Sub	63	13	13				
640	Contrast Center (CM)	DVI-PC	254	128	128				
641	Contrast Center (CM)	DVI-STB (With Setup)	254	149	149				
642	Contrast Center (CM)	DVI-STB (Without Setup)	254	128	128				
643	Contrast Center (CM)	DSUB-RGB	254	128	128				
644	Contrast Center (CM)	Expand DSUB-RGB (Reserved)	254	128	128				
645	Contrast Center (CM)	DSUB-COMP	254	137	137				
646	Brightness Center (CM)	DVI-PC	254	128	128				
647	Brightness Center (CM)	DVI-STB	254	128	128				
648	Brightness Center (CM)	DSUB-RGB	254	128	128				
649	Brightness Center (CM)	Expand DSUB-RGB (Reserved)	254	128	128				
650	Brightness Center Offset	DSUB-COMP	254	127	127				
651	Color Center (CM)	DVI-PC	127	77	77				
652	Color Center (CM)	DVI-STB (480i/576i/480p/576p)	127	77	77				
653	Color Center (CM)	DVI-STB (720p-60/1080i-60/1080i-50)	127	77	77				
654	Color Center (CM)	DVI-STB (VGA)	127	77	77				
655	Color Center (CM)	DSUB-RGB	127	77	77				
656	Tint Center (CM)	DVI-PC	254	128	128				
657	Tint Center (CM)	DVI-STB (480i/576i/480p/576p)	254	128	128				
658	Tint Center (CM)	DVI-STB (720p-60/1080i-60/1080i-50)	254	128	128				
659	Tint Center (CM)	DVI-STB (VGA)	254	128	128				
660	Tint Center (CM)	DSUB-RGB	254	128	128				
661	Center of Sharpness (HV Enhance Gain for Y)	DVI-STB (480i/576i)	31	3	3				
662	Center of Sharpness (HV Enhance Gain for Y)	DVI-STB (480p/576p)	31	2	2				
663	Center of Sharpness (HV Enhance Gain for Y)	DVI-STB (720p-60)	31	2	2				
664	Center of Sharpness (HV Enhance Gain for Y)	DVI-STB (1080i-60/1080i-50)	31	2	2				
665	Center of Sharpness (HV Enhance Gain for Y)	DVI-STB (VGA)	31	2	2				
666	DVI-STB Setup 0:None VGA/Others Yes, 1:All none 2:All have	DVI-STB mode	2	0	0				
667	HSYNC De-Jitter 0:Low (Disabled), 1:(High (Enabled)	DVI-PC	1	0	0				
668	HSYNC De-Jitter 0:Low (Disabled), 1:(High (Enabled)	DVI-STB	1	0	0				
669	HSYNC De-Jitter 0:Low (Disabled), 1:(High (Enabled)	AVC	1	0	0				
670	Horizontal Clip Offset Level for Y/G AS[YHCLPL3_P0]	NT2〜4/PAL2〜4	15	-	10				
671	EU[YHCLPL3_E_P0]	NT2〜4/PAL2〜4	15	-	10				
672	Horizontal Clip Offset Level for Y/G AS[YHCLPL3_P1]	NT2〜4/PAL2〜4	15	2	-				
673	EU[YHCLPL3_E_P1]	NT2〜4/PAL2〜4	15	5	-				
674	Y_DL (4.5MHz) For US	Main	10	7	7				
675	Y_DL (4.6MHz) For US	Sub	10	7	7				
676	Y_DL (5.5MHz PAL/NTSC4.43) For Europe	Main	10	4	4				
677	Y_DL (5.5MHz SECAM) For Europe	Main	10	1	1				
678	Y_DL (6.0PAL/NTSC4.43) For Europe	Main	10	8	8				
679	Y_DL (6.0SECAM) For Europe	Main	10	5	5				
680	Y_DL (5.5MHz PAL/NTSC4.43) For Europe	Sub	10	2	2				
681	Y_DL (5.5MHz SECAM) For Europe	Sub	10	0	0				
682	Y_DL (6.0PAL/NTSC4.43) For Europe	Sub	10	4	4				
683	Y_DL (6.0SECAM) For Europe	Sub	10	0	0				
684	Y_DL (6.5MHz PAL/NTSC4.43) For Europe	Main	10	5	5				
685	Y_DL (6.5MHz SECAM) For Europe	Main	10	5	5				
686	Y_DL (6.5MHz PAL/NTSC4.43) For Europe	Sub	10	2	2				
687	Y_DL (6.5MHz SECAM) For Europe	Sub	10	0	0				
688	Center of Sharpness (HV Enhancer Gain for Y) For Asia/US	TV	31	19	19				
689	Center of Sharpness (HV Enhancer Gain for Y) For Asia/US	VIDEO	31	24	24				
690	Center of Sharpness (HV Enhancer Gain for Y) For Asia/US	HD5/HD6	31	11	11				
691	Center of Sharpness (HV Enhancer Gain for Y) For Asia/US	HD1/HD4/HD7/HD8	31	7	7				
692	Center of Sharpness (HV Enhancer Gain for Y) For Asia/US	HD2/HD3/HD9/HD10	31	15	15				
693	Center of Sharpness (HV Enhancer Gain for Y) For Asia/US	NT2/NT3/PAL2/PAL3/NT4/PAL4	31	9	9				
694	Center of Sharpness (HV Enhancer Gain for Y) For Asia/US	TEXT(2 picture)	31	15	15				
695	Contrast mode SW (TV-Dynamic) 0:Dynamic 1:Dynamic+Auto	TV	1	0	0				
696	V detection(FORMATTER PWB) 0:out of range 128:NO V (or out of spec.) 255:interrupt	50/60Hz	255						
697	H detection(FORMATTER PWB) 0:out of range 128:NO H (or out of spec.) 255:interrupt	15/28/31/33/45kHz	255						
698	V detection(VIDEO PWB) 0:out of range 128:NO V 255:interrupt	50/60Hz	255						
699	H detection(VIDEO PWB) 0:out of range 128:NO H 255:interrupt	15/28/31/33/45kHz	255						
700	RGB Amp.Gain Adjustment (FLAON)	Main	-	-	-	O			O
701	RGB Amp.Gain Adjustment	Sub	-	-	-	O			O
702	Automatic White Peak Adj. (Single Picture)	Single Picture mode	-	-	-	O			O
703	Automatic White Peak Adj. (Multi Picture)	Multi Picture mode	-	-	-	O			O
704	EEPROM Initialize (0:No, 1:Yes)		1	0	0				
705	Adjustment Menu of FC4		-	-	-				

● The Expression of input signal mode (format)

PAL1: RF, S and Composite of PAL/SECAM
PAL2: Component of PAL (YCBCR)
PAL3: Component of PAL (YPBPR)
PAL4: Component of PAL (YCBCR-SCART)
PAL: PAL1-4
NT1: S and Composite of NTSC
NT2: Component of NTSC (YCBCR)
NT3: Component of NTSC (YPBPR)
NT4: Component of NTSC (YCBCR-SCART)
NTSC: NTSC1-4
HD1-6: Component (shown in the table→)
HD7: Component of 1080i/50 (YPBPR)
HD8: Component of 1080i/50 (YCBCR)
HD9: Component of 576p (YPBPR)
HD10: Component of 576p (YCBCR)
HD: HD1-10 of Component
TV: NTSC / HD
PC: PC signal

Video Input	System	Judgment of H.Frequency	Video Input Setup	Mode
AV1 AV2	PAL	15.75kHz (576i)	Auto	PAL2
			SDTV/DVD	PAL2
			HDTV	PAL3
	NTSC	15.75kHz (480i)	Auto	NT2
			SDTV/DVD	NT2
			HDTV	NT3
	PAL	31.25kHz (576p)	Auto	HD10
			SDTV/DVD	HD10
			HDTV	HD9
	NTSC	31.50kHz (480p)	Auto	HD3
			SDTV/DVD	HD3
			HDTV	HD2
	NTSC	45.00kHz (720p)	Auto	HD5
			SDTV/DVD	HD6
			HDTV	HD5
	PAL	28.125kHz (1080i)	Auto	HD7
			SDTV/DVD	HD8
			HDTV	HD7
	NTSC	33.75kHz (1080i)	Auto	HD1
			SDTV/DVD	HD4
			HDTV	HD1

● Factory Reset
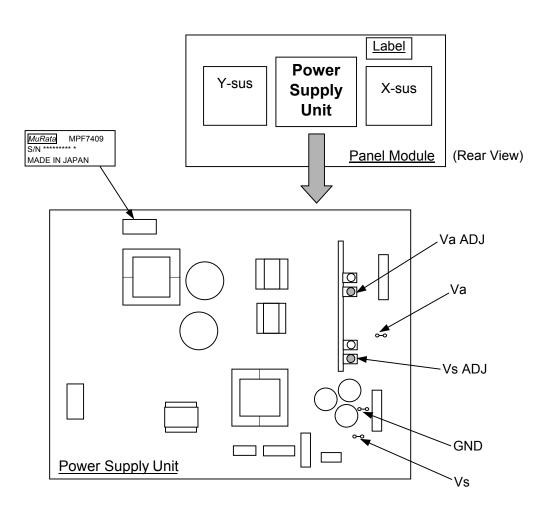
After all of the adjustments of main chassis are finished, perform FACTORY RESET.
Press the SUB-POWER(⏻) button, INPUT SELECT(⎚) button and ▲ button at the same time, and hold for more than 5 seconds.
The unit is set to factory settings.
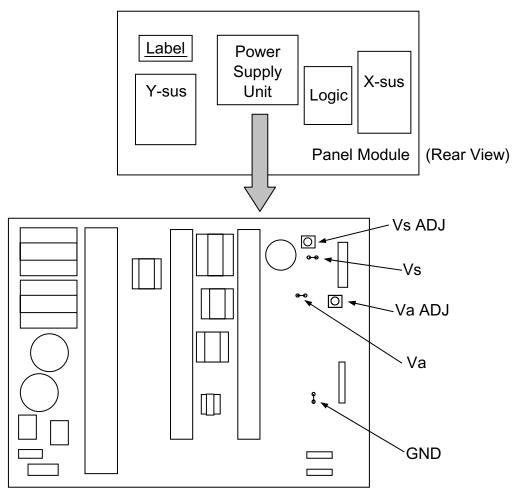
Item	Vs and Va VOLTAGE ADJUSTMENT	
Applicable Model	32PD5000, 37PD5000, 37PD5000	
Preparation		Procedure
(1) Keep heat-run for 1 minutes or more.		(1) If the difference between the printed voltage of Vs and the indicated value of Vs Voltmeter is over 0.1V, adjust the Vs ADJ VR located upward on the Power Supply Unit to make it within 0.1V.
(2) Connect the DC Voltmeter to the Vs test point and the GND point (or the Va test point and the GND point) on the Power Supply Unit.		(2) If the difference between the printed voltage of Va and the indicated value of Va Voltmeter is over 0.2V, adjust the Va ADJ VR located upward on the Power Supply Unit to make it within 0.2V.
(3) Receive the all black signal with no setup.		(3) Check and do the procedure (1) again.
(4) Check the indication of Vs and Va voltages printed on the label located upper right side on the Panel Module.		<Example of the Voltage Label> <LOT> ************** Vs= 80.0V Va=60.0V Vw=140.0V Vx=60.0V

Item	Vs and Va VOLTAGE ADJUSTMENT
Applicable Model	55PMA500E

Preparation	Procedure
(1) Keep heat-run for 1 minutes or more.	(1) If the difference between the printed voltage of Vs and the indicated value of Vs Voltmeter is over 0.1V, adjust the Vs ADJ VR located on the Power Supply Unit to make it within 0.1V.
(2) Connect the DC Voltmeter to the Vs test point and the GND point (or the Va test point and the GND point) on the Power Supply Unit.	(2) If the difference between the printed voltage of Va and the indicated value of Va Voltmeter is over 0.2V, adjust the Va ADJ VR located on the Power Supply Unit to make it within 0.2V.
(3) Receive the all black signal with no setup.	(3) Check and do the procedure (1) again.
(4) Check the indication of Vs and Va voltages printed on the label located upper left side on the Panel Module.	<Example of the Voltage Label> <LOT> ************** Vs= 82.0V Va=63.0V Vw=180.0V Vx=40.0V

Power Supply Unit

Item	AGC ADJUSTMENT	
Applicable Model	42PD5200, 32PD5200, 37PD5200	
Preparation		Procedure

Preparation	Procedure

(1) Keep heat-run for 5 minutes or more.
 	
(2) Receive the adjustment signal at ANT terminal.
    <u>Signal condition</u>
      CCIR ch-5 (175.25MHz)
      PAL B/G Philips Pattern
      Input Field Strength: -50dBm
	(1) Enter the service adjustment mode, and indicate No.289 (AGC Adjustment) and No.291 (AGC Input).
	
	(2) Increase the data of No.289 until the data of No.291 converges. (This is the point of AGC-MAX.)
	
	(3) Decrease the data of No.289 until the data of No.291 diminishes, and then press the OK button.

Item	AUTOMATIC SIGNAL LEVEL ADJUSTMENT –RGB (1)
Applicable Model	42PD5100, 42PD5200, 32PD5200, 37PD5200, 55PMA550E
Preparation	Procedure
(1) Input the adjustment signal of VGA (60Hz) format into RGB2 [D-sub] input terminal. the adjustment signal The signal level of black area should be pedestal level. This signal must not be inserted characters etc. Black White **0.7V**	(1) Select RGB2 and enter the service adjustment mode. (2) Select No.700 "RGB Amp. Gain ADJ." and press OK button for more than 2 seconds to start the adjustment. It will complete the adjustment after the OSD of "AUTO MODE" disappeared.

[Note] Never adjust without use of the specified signal.
     If that were done by mistake, the picture would become abnormal in black level, contrast and color.
     In this case, it will be recovered by re-adjustment in the specified way.

Item	AUTOMATIC SIGNAL LEVEL ADJUSTMENT –RGB (2)
Applicable Model	42PD5100, 42PD5200, 32PD5200, 37PD5200, 55PMA550E
Preparation	Procedure
(1) Input the adjustment signal of 576p or 480p format into AV1 input terminal. the adjustment signal The signal level of black area should be pedestal level. This signal must not be inserted characters etc. Black White **0.7V**	(1) Select AV1 and enter the service adjustment mode. (2) Select No.700 "RGB Amp. Gain ADJ." and press OK button for more than 2 seconds to start the adjustment. It will complete the adjustment after the OSD of "AUTO MODE" disappeared. (3) Select No.701 "RGB Amp. Gain ADJ." and press OK button for more than 2 seconds to start the adjustment. It will complete the adjustment after the OSD of "AUTO MODE" disappeared.

[Note] Never adjust without use of the specified signal.
     If that were done by mistake, the picture would become abnormal in black level, contrast and color.
     In this case, it will be recovered by re-adjustment in the specified way.

Item	AUTOMATIC SIGNAL LEVEL ADJUSTMENT –VIDEO	
Applicable Model	42PD5100, 42PD5200, 32PD5200, 37PD5200, 55PMA550E	
Preparation		Procedure
(1) Input the adjustment signal of 576p or 480p format into AV1 input terminal. the adjustment signal The signal level of black area should be pedestal level. This signal must not be inserted characters etc. Black White 0.7V		(1) Select AV1 and enter the service adjustment mode. (2) Select No.703 "Automatic White peak Adj. (Multi)" and press OK button for more than 2 seconds to start the adjustment. It will complete the adjustment after the OSD of "AUTO MODE" disappeared.

[Note] Never adjust without use of the specified signal.
If that were done by mistake, the picture would become abnormal in black level, contrast and color.
In this case, it will be recovered by re-adjustment in the specified way.

Item	AUTOMATIC SIGNAL LEVEL ADJUSTMENT –TV	
Applicable Model	42PD5200, 32PD5200, 37PD5200, 55PMA550E	
Preparation		Procedure
(1) Input the adjustment signal modulated to RF frequency into ANT terminal. the adjustment signal 1.0V Window		(1) Select TV channel of the adjustment signal and enter the service adjustment mode. (2) Select No.702 "Automatic White peak Adj. (Single)" and press OK button for more than 2 seconds to start the adjustment. It will complete the adjustment after the OSD of "AUTO MODE" disappeared.

[Note] Never adjust without use of the specified signal.
If that were done by mistake, the picture would become abnormal in black level, contrast and color.
In this case, it will be recovered by re-adjustment in the specified way.

Item	COLOR TEMPERATURE ADJUSTMENT -VIDEO	
Applicable Model	42PD5100, 42PD5200, 32PD5200,	
Preparation Procedure		

(1) Set CRT COLOR ANALYZER at the center of the screen panel.
 	
(2) Input the full-white raster signal to AV1 component terminal and select AV1.
    Signal condition
       480i component
       Video level: 0.714Vp-p
       Sync level: 0.286Vp-p
       Setup level: 0V
 	
(3) Set the display size to "Full".
 	
(This item must be done before the same adjustment for PC mode.)
	[Adjustment of Cool mode]
	(1) Enter the service adjustment mode, and confirm that No.0(R), 1(G) and 2(B) are all 255. If the some data are not, set to 255.
	(2) Adjust the color temperature by way that reduces the one or two data in No.0, 1 or 2.
	(Note: At least one of them should be 255 after adjustment.)
	
	<Specification>
	Color Temperature (Cool) for Video
	    12000K x=0.268±0.005
	               y=0.283±0.005
	
	[Adjustment of Normal mode]
	(3) Enter the service adjustment mode, and confirm that No.3(R), 4(G) and 5(B) are all 255. If the some data are not, set to 255.
	(4) Adjust the color temperature by way that reduces the one or two data in No.3, 4 or 5.
	(Note: At least one of them should be 255 after adjustment.)
	
	<Specification>
	Color Temperature (Normal) for Video
	    9300K x=0.285±0.005
	               y=0.293±0.005
	
	[Adjustment of Warm mode]
	(5) Enter the service adjustment mode, and confirm that No.6(R), 7(G) and 8(B) are all 255. If the some data are not, set to 255.
	(6) Adjust the color temperature by way that reduces the one or two data in No.6, 7 or 8.
	(Note: At least one of them should be 255 after adjustment.)
	
	<Specification>
	Color Temperature (Warm) for Video
	    6500K x=0.314±0.005
	               y=0.327±0.005
	
	[Adjustment of Black / White mode]
	(7) Enter the service adjustment mode, and confirm that No.9(R), 10(G) and 11(B) are all 255. If the some data are not, set to 255.
	(8) Adjust the color temperature by way that reduces the one or two data in No.9, 10 or 11.
	(Note: At least one of them should be 255 after adjustment.)
	
	<Specification>
	Color Temperature (B/W) for Video
	    5400K x=0.335±0.005
	               y=0.343±0.005

Item	COLOR TEMPERATURE ADJUSTMENT -VIDEO	
Applicable Model	55PMA500E	
Preparation	Procedure	

Preparation	Procedure

(This item must be done before the color temperature adjustment for PC mode.)
 	
(1) Set CRT COLOR ANALYZER at the center of the screen panel.
(2) Input the full-white raster signal to AV1 component terminal and select AV1.
    Signal condition
      480i component
      Video level: 0.280Vp-p
      Sync level: 0.286Vp-p
      Setup level: 0V
 	
(3) Set the display size to "Full".
 	
(4) Change the input signal level to AV1 as below;
      Video level: 0.714Vp-p
	[Adjustment of Cool mode]
	(1) Enter the service adjustment mode, and confirm that No.0(R), 1(G) and 2(B) are all 255. If the some data are not, set to 255.
	(2) Adjust the color temperature by way that reduces the one or two data in No.0, 1 or 2.
	(Note: At least one of them should be 255 after adjustment.)
	
	    `<Specification>`
	    Color Temperature (Cool) for Video
	      15000K x=0.264±0.005
	                  y=0.263±0.005
	
	[Adjustment of Normal mode]
	(3) Enter the service adjustment mode, and confirm that No.3(R), 4(G) and 5(B) are all 255. If the some data are not, set to 255.
	(4) Adjust the color temperature by way that reduces the one or two data in No.3, 4 or 5.
	(Note: At least one of them should be 255 after adjustment.)
	
	    `<Specification>`
	    Color Temperature (Normal) for Video
	      9300K x=0.285±0.005
	                  y=0.293±0.005
	
	[Adjustment of Warm mode]
	(5) Enter the service adjustment mode, and confirm that No.6(R), 7(G) and 8(B) are all 255. If the some data are not, set to 255.
	(6) Adjust the color temperature by way that reduces the one or two data in No.6, 7 or 8.
	(Note: At least one of them should be 255 after adjustment.)
	
	    `<Specification>`
	    Color Temperature (Warm) for Video
	      6500K x=0.314±0.005
	                  y=0.327±0.005
	
	[Adjustment of Black / White mode]
	(7) Enter the service adjustment mode, and confirm that No.9(R), 10(G) and 11(B) are all 255. If the some data are not, set to 255.
	(8) Adjust the color temperature by way that reduces the one or two data in No.9, 10 or 11.
	(Note: At least one of them should be 255 after adjustment.)
	
	    `<Specification>`
	    Color Temperature (B/W) for Video
	      5400K x=0.335±0.005
	                  y=0.343±0.005

Item	COLOR TEMPERATURE ADJUSTMENT -VIDEO
Applicable Model	37PD5200

Preparation	Procedure

(This item must be done before the color temperature adjustment for PC mode.)
 	
(1) Set CRT COLOR ANALYZER at the center of the screen panel.
 	
(2) Input the full-white raster signal to AV1 component terminal and select AV1.
    <u>Signal condition</u>
      480i component
      Video level: 0.700Vp-p
      Sync level: 0.300Vp-p
      Setup level: 0V
 	
(3) Set the display size to "Full".
	[Adjustment of Cool mode]
	(1) Enter the service adjustment mode, and confirm that No.0(R), 1(G) and 2(B) are all 255. If the some data are not, set to 255.
	(2) Adjust the color temperature by way that reduces the one or two data in No.0, 1 or 2.
	(Note: At least one of them should be 255 after adjustment.)
	
	   \<Specification\>
	   Color Temperature (Cool) for Video
	      12000K $x=0.268\pm0.005$
	                       $y=0.283\pm0.005$
	
	[Adjustment of Normal mode]
	(3) Enter the service adjustment mode, and confirm that No.3(R), 4(G) and 5(B) are all 255. If the some data are not, set to 255.
	(4) Adjust the color temperature by way that reduces the one or two data in No.3, 4 or 5.
	(Note: At least one of them should be 255 after adjustment.)
	
	   \<Specification\>
	   Color Temperature (Normal) for Video
	      9300K $x=0.285\pm0.005$
	                     $y=0.293\pm0.005$
	
	[Adjustment of Warm mode]
	(5) Enter the service adjustment mode, and confirm that No.6(R), 7(G) and 8(B) are all 255. If the some data are not, set to 255.
	(6) Adjust the color temperature by way that reduces the one or two data in No.6, 7 or 8.
	(Note: At least one of them should be 255 after adjustment.)
	
	   \<Specification\>
	   Color Temperature (Warm) for Video
	      6500K $x=0.314\pm0.005$
	                     $y=0.327\pm0.005$
	
	[Adjustment of Black / White mode]
	(7) Enter the service adjustment mode, and confirm that No.9(R), 10(G) and 11(B) are all 255. If the some data are not, set to 255.
	(8) Adjust the color temperature by way that reduces the one or two data in No.9, 10 or 11.
	(Note: At least one of them should be 255 after adjustment.)
	
	   \<Specification\>
	   Color Temperature (B/W) for Video
	      5400K $x=0.335\pm0.005$
	                     $y=0.343\pm0.005$

Item	COLOR TEMPERATURE ADJUSTMENT -PC
Applicable Model	42PD5100, 42PD5200, 32PD5200, 37PD5200, 55PMA550E

Preparation	Procedure

(1) Set CRT COLOR ANALYZER at the center of the screen panel.
 	
(2) Input the full-white raster signal to RGB2 D-sub terminal and select RGB2-RGB.
   Signal condition
     VGA (75)
     Video level: 0.7Vp-p
     Setup level: 0V
 	
(3) Set the display area to "Full".
 	
(This item must be done after the same adjustment for VIDEO mode.)
	[Adjustment of Cool mode]
	(1) Enter the service adjustment mode, and confirm that No.12(R), 13(G) and 14(B) are all 255. If the some data are not, set to 255.
	(2) Adjust the color temperature by way that reduces the one or two data in No.12, 13 or 14.
	(Note: At least one of them should be 255 after adjustment.)
	
	    <Specification>
	    Color Temperature (Cool) for PC
	       12000K x=0.268±0.005
	                   y=0.283±0.005
	
	[Adjustment of Normal, Warm, Black/White mode]
	(3) Set the adjusted value of COLOR TEMP. ADJ. -VIDEO (Normal, Warm, Black/White mode; Adj No. 3, 4, 5, 6, 7, 8, 9, 10, 11) to Adj No. 15, 16, 17, 18, 19, 20, 21, 22, 23.
	
	     [at VIDEO] [at PC]
	     No. 3 data ⟶ No.15 data
	     No. 4 data No.16 data
	        - -
	        - -
	     No.11 data No.23 data
	
	    <Specification>
	    Color Temperature (Normal) for PC
	       9300K x=0.285±0.005
	                   y=0.293±0.005
	
	    <Specification>
	    Color Temperature (Warm) for PC
	       6500K x=0.314±0.005
	                   y=0.327±0.005
	
	    <Specification>
	    Color Temperature (B/W) for PC
	       5400K x=0.335±0.005
	                   y=0.343±0.005

Item	COLOR TEMPERATURE ADJUSTMENT -VIDEO	
Applicable Model	42PD5000, 32PD5000	
Preparation Procedure		

Preparation

(1) Connect the AVC jig and set CRT COLOR ANALYZER at the center of the screen panel.

(2) Set AVC jig to "Standard" of VIDEO mode, and input the full-white raster signal to component terminal.
　　Signal condition
　　　　480i component
　　　　Video level: 0.714Vp-p
　　　　Sync level: 0.286Vp-p
　　　　Setup level: 0V

(3) Set the display size to "Full".

(This item must be done before the same adjustment for PC mode.)

Procedure

[Adjustment of Cool mode]
(1) Enter the service adjustment mode, and confirm that No.0(R), 1(G) and 2(B) are all 255. If the some data are not, set to 255.
(2) Adjust the color temperature by way that reduces the one or two data in No.0, 1 or 2.
(Note: At least one of them should be 255 after adjustment.)

```
<Specification>
Color Temperature (Cool) for Video
      12000K         x=0.268±0.005
                     y=0.283±0.005
```

[Adjustment of Normal mode]
(3) Enter the service adjustment mode, and confirm that No.3(R), 4(G) and 5(B) are all 255. If the some data are not, set to 255.
(4) Adjust the color temperature by way that reduces the one or two data in No.3, 4 or 5.
(Note: At least one of them should be 255 after adjustment.)

```
<Specification>
Color Temperature (Normal) for Video
      9300K         x=0.285±0.005
                    y=0.293±0.005
```

[Adjustment of Warm mode]
(5) Enter the service adjustment mode, and confirm that No.6(R), 7(G) and 8(B) are all 255. If the some data are not, set to 255.
(6) Adjust the color temperature by way that reduces the one or two data in No.6, 7 or 8.
(Note: At least one of them should be 255 after adjustment.)

```
<Specification>
Color Temperature (Warm) for Video
      6500K         x=0.314±0.005
                    y=0.327±0.005
```

Item	COLOR TEMPERATURE ADJUSTMENT -VIDEO
Applicable Model	37PD5200

Preparation	Procedure

(This item must be done before the color temperature adjustment for PC mode.)
(1) Connect the AVC jig and set CRT COLOR ANALYZER at the center of the screen panel.
(2) Set AVC jig to "Standard" of VIDEO mode, and input the full-white raster signal to component terminal.
<u>Signal condition</u>
   480i component
   Video level: 0.700Vp-p
   Sync level: 0.300Vp-p
   Setup level: 0V
 	
(3) Set the display size to "Full".
	[Adjustment of Cool mode]
	(1) Enter the service adjustment mode, and confirm that No.0(R), 1(G) and 2(B) are all 255. If the some data are not, set to 255.
	(2) Adjust the color temperature by way that reduces the one or two data in No.0, 1 or 2.
	(Note: At least one of them should be 255 after adjustment.)
	
	   <Specification>
	   Color Temperature (Cool) for Video
	      12000K $x=0.268\pm0.005$
	                   $y=0.283\pm0.005$
	
	[Adjustment of Normal mode]
	(3) Enter the service adjustment mode, and confirm that No.3(R), 4(G) and 5(B) are all 255. If the some data are not, set to 255.
	(4) Adjust the color temperature by way that reduces the one or two data in No.3, 4 or 5.
	(Note: At least one of them should be 255 after adjustment.)
	
	   <Specification>
	   Color Temperature (Normal) for Video
	      9300K $x=0.285\pm0.005$
	                   $y=0.293\pm0.005$
	
	[Adjustment of Warm mode]
	(5) Enter the service adjustment mode, and confirm that No.6(R), 7(G) and 8(B) are all 255. If the some data are not, set to 255.
	(6) Adjust the color temperature by way that reduces the one or two data in No.6, 7 or 8.
	(Note: At least one of them should be 255 after adjustment.)
	
	   <Specification>
	   Color Temperature (Warm) for Video
	      6500K $x=0.314\pm0.005$
	                   $y=0.327\pm0.005$

Item	COLOR TEMPERATURE ADJUSTMENT -PC	
Applicable Model	42PD5000, 32PD5000, 37PD5200	
Preparation Procedure		

(1) Connect the AVC jig and set CRT COLOR ANALYZER at the center of the screen panel.

(2) Set AVC jig to "Standard" of PC mode, and input the full-white raster signal to RGB terminal.
    <u>Signal condition</u>
      VGA (75)
      Video level: 0.7Vp-p
      Setup level: 0V

(3) Set the display area to "Full".

(This item must be done after the same adjustment for VIDEO mode.)

[Adjustment of Cool mode]
(1) Enter the service adjustment mode, and confirm that No.12(R), 13(G) and 14(B) are all 255. If the some data are not, set to 255.

(2) Adjust the color temperature by way that reduces the one or two data in No.12, 13 or 14.
(Note: At least one of them should be 255 after adjustment.)

<Specification>
Color Temperature (Cool) for PC
    12000K   x=0.268±0.005
                   y=0.283±0.005

[Adjustment of Normal, Warm, Black/White mode]
(3) Set the adjusted value of COLOR TEMP. ADJ. -VIDEO (Normal, Warm, Black/White mode; Adj No. 3, 4, 5, 6, 7, 8) to Adj No. 3, 4, 5, 6, 7, 8.

    [at VIDEO]   [at PC]
    No.3 data ⟶ No.3 data
    No.4 data   No.4 data
       -          -
       -          -
    No.8 data   No.8 data

<Specification>
Color Temperature (Normal) for PC
    9300K   x=0.285±0.005
                  y=0.293±0.005

<Specification>
Color Temperature (Warm) for PC
    6500K   x=0.314±0.005
                  y=0.327±0.005

7. Troubleshooting

● How to get to Burn-in mode

This mode displays the test patterns of some single color raster in turn. These signals are from built-in generator of PDP panel. So it can be presumed that maybe the panel has some trouble when the screen of Burn-in mode is abnormal.

Using the front control buttons with the set turned off (standby) can activate this mode.

Press the SUB-POWER(⏻) button, INPUT SELECT(↩) button and VOLUME DOWN(◢) button at the same time, and hold for more than 5 seconds.

The set turns on with single color raster and the OSD of [BURN IN: ON].

To escape from this mode, press the SUB-POWER(⏻) button, INPUT SELECT(↩) button and ▲ button at the same time, and hold for more than 5 seconds. Burn-in mode will be released.

● How to recover the remote and front key function

If remote and front key cannot operate after miss set special function by front keys, these functions can recover by below method.

Press the SUB-POWER(⏻) button, INPUT SELECT(↩) button and ▼ button at the same time, and hold for more than 5 seconds.

The set turns on the service menu mode.

Select No.175 and data set from [0] to [1].

Or

Press the SUB-POWER(⏻) button and ▼ button at the same time, and hold for more than 5 seconds

● Forced AVC mode (only for 37PD5200)

This model is set to "Forced AVC" mode. It makes the set cannot be turned on without connecting AVC.

Following procedures should be referred when servicing 42/32PD5200 without AVC box.

Procedure of escaping from this mode   (before servicing)

Using the front control buttons with the set turned off (standby) can activate it.

Press the SUB-POWER button and VOLUME▲ button at the same time, and hold for more than 5 seconds.
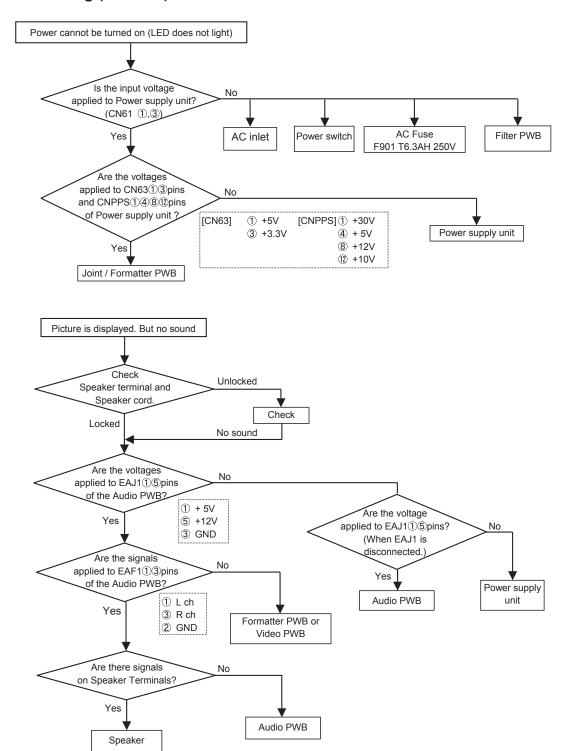
The set will be changed that the power of the monitor can be turned on without AVC.
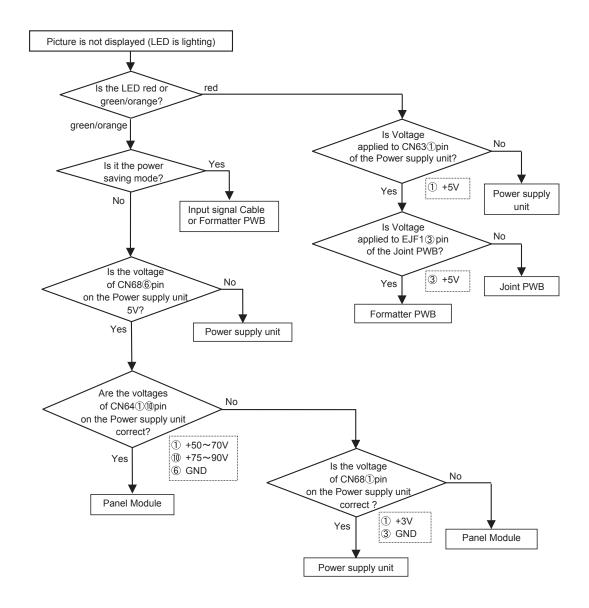
Procedure of getting into this mode again   (after servicing)

(1) Enter Adjustment Mode.

(2) Select adjustment code (No.323) and change the data value from 0 to 1.

The set will be changed again that the power of the monitor cannot be turned on without AVC.

● **Troubleshooting (POWER)**

Power cannot be turned on (LED does not light)

Is the input voltage applied to Power supply unit? (CN61 ①,③) — **No** →

| AC inlet | Power switch | AC Fuse F901 T6.3AH 250V | Filter PWB |

Yes

Are the voltages applied to CN63①③pins and CNPPS①④⑧⑫pins of Power supply unit ? — **No** →

Power supply unit

[CN63]　① +5V　　[CNPPS]① +30V
　　　　　③ +3.3V　　　　　④ + 5V
　　　　　　　　　　　　　　⑧ +12V
　　　　　　　　　　　　　　⑫ +10V

Yes

Joint / Formatter PWB

Picture is displayed. But no sound

Check Speaker terminal and Speaker cord. — **Unlocked** → Check

Locked ← **No sound**

Are the voltages applied to EAJ1①⑤pins of the Audio PWB? — **No** →

① + 5V
⑤ +12V
③ GND

Are the voltage applied to EAJ1①⑤pins? (When EAJ1 is disconnected.) — **No** → Power supply unit

Yes → Audio PWB

Yes

Are the signals applied to EAF1①③pins of the Audio PWB? — **No** → Formatter PWB or Video PWB

① L ch
③ R ch
② GND

Yes

Are there signals on Speaker Terminals? — **No** → Audio PWB

Yes

Speaker

32PD5000/42PD5000 (PW1)

```
┌─────────────────────────────────────┐
│ Picture is not displayed (LED is lighting) │
└─────────────────────────────────────┘
                  │
                  ▼
           ◇ Is the LED red or ◇─── red ───────────────────────┐
           ◇ green/orange?     ◇                               │
                  │                                             ▼
            green/orange                              ◇ Is Voltage                ◇── No ──┐
                  │                                    ◇ applied to CN63①pin       ◇        │
                  ▼                                    ◇ of the Power supply unit? ◇        ▼
           ◇ Is it the power ◇── Yes ──┐                        │              ┌──────────────────┐
           ◇ saving mode?    ◇         │                       Yes  ┌ ① +5V ┐  │ Power supply unit │
                  │                    ▼                         │   └───────┘  └──────────────────┘
                 No          ┌──────────────────┐                ▼
                  │          │ Input signal Cable │      ◇ Is Voltage               ◇── No ──┐
                  │          │ or Formatter PWB   │      ◇ applied to EJF1③pin        ◇        │
                  ▼          └──────────────────┘      ◇ of the Joint PWB?           ◇        ▼
           ◇ Is the voltage ◇── No ──┐                         │               ┌───────────┐
           ◇ of CN68⑥pin    ◇        │                        Yes  ┌ ③ +5V ┐   │ Joint PWB │
           ◇ on the Power supply unit ◇       │                     │   └───────┘   └───────────┘
           ◇ 5V?            ◇        ▼                              ▼
                  │          ┌──────────────────┐           ┌──────────────┐
                 Yes         │ Power supply unit │           │ Formatter PWB │
                  │          └──────────────────┘           └──────────────┘
                  ▼
           ◇ Are the voltages ◇── No ──────────────┐
           ◇ of CN64①⑩pin    ◇                     │
           ◇ on the Power supply unit ◇             │
           ◇ correct?        ◇                     ▼
                  │    ┌ ① +50～70V ┐      ◇ Is the voltage ◇── No ──┐
                 Yes   │ ⑩ +75～90V │      ◇ of CN68①pin    ◇        │
                  │    │ ⑥ GND     ┘      ◇ on the Power supply unit ◇    │
                  ▼                        ◇ correct ?       ◇        ▼
           ┌──────────────┐                      │  ┌ ① +3V ┐  ┌──────────────┐
           │ Panel Module │                     Yes │ ③ GND │  │ Panel Module │
           └──────────────┘                      │  └───────┘  └──────────────┘
                                                 ▼
                                        ┌──────────────────┐
                                        │ Power supply unit │
                                        └──────────────────┘
```

● **Troubleshooting (PICTURE)   .... for 42PD5100MA, 32/37/42PD5200, 55PMA500E**

[VIDEO PWB Circuit]

```
┌──────────────────────────────┐
│  No picture, no color or dark │
└──────────────────────────────┘
```

No picture, no color or dark

Single picture or Main picture | Sub picture → ①Trouble of Sub picture

Are waveforms at pin1(Y), Pin3(CB) and pin5(CR) of PYM? — Yes → Check Formatter PWB

No

Are waveforms at pin 37(Y), 36(CB) and 35(CR) of I202? — Yes → Check Q205, Q206, Q207 etc.

No

Component Input | RF(TV) / Video Input

Are waveforms at pin9(Y), 11(CB) and 13(CR) of I202? — Yes → Check I202 ← Yes — Are waveforms at pin39(Y), 41(CB) and 43(CR) of I202?

No → Check Input terminal

No — Are waveforms at pin21(Y), 22(CB) and 23(CR) of I501? — Yes → Check Q508, Q509, and Q510

No

PAL/SECAM | NTSC

Are waveforms at pin44 (Y) and 43 (C) of I501? — Yes → Check I501 ← Yes — Are waveforms at pin5 (Y) and 7 (C) of I501?

No — Are waveforms at pin25 (Y) and 27 (C) of I301? — Yes → Check Q322～Q327 X304 or X305, etc.

No — Are waveforms at pin89 (Y) and 88 (C) of I302? — Yes → Check Q317～Q324, Q328, X302 or X303, etc.

No — Are waveforms at pin7 of I301? — Yes → Check I301

No — Are waveforms at pin93 of I302? — Yes → Check I3A1

No — Are waveforms at pin44 of I201? — Yes → Check Q203, Q301～Q307 etc.

No → Check I201, U101 etc.

```
                        ┌──────────────────────────┐
                        │ ①Trouble of Sub picture  │
                        └──────────────────────────┘
                                     │
                                     ▼
                    ╱───────────────────────────╲              Yes   ┌──────────────────────────┐
                   ╱  Are waveforms at pin1(Y),   ╲──────────────────▶│  Check Formatter PWB     │
                   ╲  pin3(CB) and pin5(CR)        ╱                   └──────────────────────────┘
                    ╲  of PYS?                    ╱
                     ╲───────────────────────────╱
                                 │ No
                                 ▼
                    ╱───────────────────────────╲            Yes    ┌────────────────────────────────┐
                   ╱  Are waveforms at pin 33(Y), ╲──────────────────▶│ Check Q208, Q209, Q214, Q215, etc.│
                   ╲  32(CB) and  31(CR) of I202?  ╱                  └────────────────────────────────┘
                    ╲───────────────────────────╱
                              │ No
                              ├──────────────────────────────────────────────────────┐
                              ▼                                                        ▼
                    ┌─────────────────────┐                            ┌──────────────────────────┐
                    │  Component Input     │                            │  RF(TV) / Video Input    │
                    └─────────────────────┘                            └──────────────────────────┘
                              │ No                                                │
                              ▼                                                   ▼
        ╱───────────────────────────╲   Yes   ┌──────────────┐   Yes    ╱───────────────────────────╲
       ╱ Are waveforms at pin9(Y),    ╲───────▶│  Check I202  │◀────────╱ Are waveforms at pin45(Y),  ╲
       ╲ 11(CB) and 13(CR) of I202?    ╱       └──────────────┘         ╲ 47(CB) and 1(CR) of I202?    ╱
        ╲───────────────────────────╱                                   ╲───────────────────────────╱
                    │ No                                                           │ No
                    ▼                                                              │
        ┌──────────────────────┐                                                  ▼
        │  Check Input terminal │                          ╱───────────────────────────╲   Yes   ┌──────────────────┐
        └──────────────────────┘                         ╱ Are waveforms at pin21(Y),   ╲───────▶│ Check Q511, Q512,│
                                                         ╲ 22(CB) and 23(CR) of I502?    ╱        │ and Q513         │
                                                          ╲───────────────────────────╱          └──────────────────┘
                                                                     │ No
                                                                     ▼
                                                         ╱───────────────────────────╲   Yes   ┌──────────────┐
                                                        ╱ Are waveforms at pin1 of I502?╲──────▶│ Check I502.  │
                                                        ╲                               ╱       └──────────────┘
                                                         ╲───────────────────────────╱
                                                                   │ No
                                                                   ▼
                                                         ╱───────────────────────────╲   Yes   ┌──────────────────┐
                                                        ╱  Are waveforms at pin53      ╲───────▶│ Check Q202, etc. │
                                                        ╲  of I201?                     ╱        └──────────────────┘
                                                         ╲───────────────────────────╱
                                                                   │ No
                                                                   ▼
                                                         ┌──────────────────────────┐
                                                         │  Check I201, U101 etc.   │
                                                         └──────────────────────────┘
```
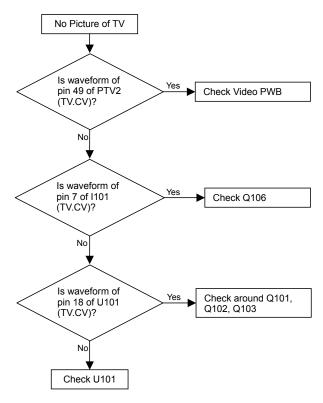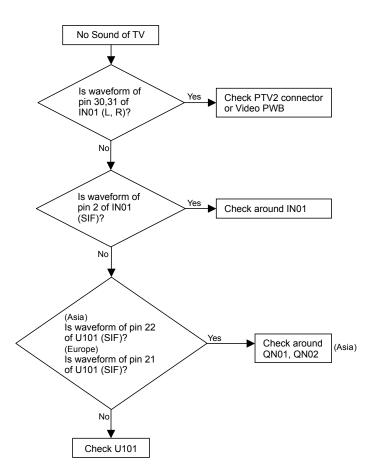
● **Trouble Shooting (Synchronization)   .... for 42PD5100, 32/3742PD5200, 55PMA500E**

[VIDEO PWB Circuit]

```
                    ┌──────────────────┐
                    │    No Sync.      │
                    └────────┬─────────┘
              ┌──────────────┴──────────────┐
     ┌────────────────────────────┐  ┌──────────────┐      ┌──────────────────────────┐
     │ Single picture or Main      │  │  Sub picture │─────▶│ ①Trouble of Sub picture  │
     │ picture                     │  └──────────────┘      └──────────────────────────┘
     └─────────────┬───────────────┘

        ◇ Are waveform at TP01(H) and ──Yes──▶ ┌──────────────────────┐
           TP02(V) ?                            │ Check Formatter PWB  │
          │ No                                  └──────────────────────┘

        ◇ Are waveform at pin 16(H) and ──Yes──▶ ┌────────────┐
           28(V) of I601?                         │ Check I602 │
          │ No                                    └────────────┘
```

Component Input (without 480i/576i)   **RF(TV) / Video Input / Component (480i/576i)**

◇ Are waveforms at pin24 of I601? ──Yes──▶ **Check I601** ◀──Yes── ◇ Are waveforms at pin3(H) and pin4 (V) of I601?

No (from pin24) ──▶ **Check Q601, Q603, Q609, Q610, etc.**

No (from pin3/4) ──▶ ◇ Are waveforms at pin9 (H) and pin4 (V) of I501? ──Yes──▶ **Check I602**

No ──▶ **Check I501, etc.**

①Trouble of Sub picture

Are waveforms at TP03(H) and TP04(V) ? — Yes → Check Formatter PWB.

No ↓

Are waveforms at pin 19(H) and 29(V) of I601? — Yes → Check I602

No ↓

Component Input (without 480i/576i)

RF(TV) / Video Input / Component (480i/576i)

Are waveforms at pin26 of I601? — Yes → Check I601 ← Yes — Are waveforms at pin1(H) and Pin2 (V) of I601?

No ↓

Check Q606, Q608, Q609, Q610, etc.

No ↓

Are waveforms at pin9 (H) and pin4 (V) of I502? — Yes → Check I602

No ↓

Check I502,etc.

● **Troubleshooting (TV / Teletext)   .... for 32/37/42PD5000, 55PMA550E**

[TUNER PWB]

```
                    ┌─────────────────────┐
                    │   No Picture of TV   │
                    └─────────────────────┘
                               │
                               ▼
                         ╱───────────╲
                       ╱   Is waveform  ╲        Yes    ┌──────────────────────┐
                      ╱   of pin 49 of    ╲──────────▶  │   Check Video PWB     │
                      ╲    PTV2 (TV.CV)?  ╱             └──────────────────────┘
                       ╲───────────────╱
                               │ No
                               ▼
                         ╱───────────╲
                       ╱   Is waveform  ╲        Yes    ┌──────────────────────┐
                      ╱   of pin 7 of      ╲──────────▶  │   Check Q106          │
                      ╲    I101 (TV.CV)?  ╱             └──────────────────────┘
                       ╲───────────────╱
                               │ No
                               ▼
                         ╱───────────╲
                       ╱   Is waveform  ╲        Yes    ┌──────────────────────┐
                      ╱   of pin 18 of     ╲──────────▶  │  Check around Q101,   │
                      ╲    U101 (TV.CV)?  ╱             │  Q102, Q103           │
                       ╲───────────────╱               └──────────────────────┘
                               │ No
                               ▼
                    ┌─────────────────────┐
                    │     Check U101       │
                    └─────────────────────┘
```

```
                    ┌─────────────────────┐
                    │   No Sound of TV     │
                    └─────────────────────┘
                               │
                               ▼
                         ╱───────────╲
                       ╱   Is waveform  ╲        Yes    ┌──────────────────────┐
                      ╱   of pin 30,31 of  ╲──────────▶  │  Check PTV2 connector │
                      ╲   IN01 (L, R)?    ╱             │  or Video PWB         │
                       ╲───────────────╱               └──────────────────────┘
                               │ No
                               ▼
                         ╱───────────╲
                       ╱   Is waveform  ╲        Yes    ┌──────────────────────┐
                      ╱   of pin 2 of      ╲──────────▶  │  Check around IN01    │
                      ╲   IN01 (SIF)?     ╱             └──────────────────────┘
                       ╲───────────────╱
                               │ No
                               ▼
                         ╱───────────╲
                       ╱ (Asia)         ╲
                      ╱ Is waveform of    ╲
                     ╱ pin 22 of U101       ╲   Yes   ┌──────────────────────┐
                     ╲ (SIF)?               ╱──────▶  │  Check around         │ (Asia)
                      ╲ (Europe)           ╱         │  QN01, QN02           │
                       ╲ Is waveform of   ╱          └──────────────────────┘
                        ╲ pin 21 of U101 ╱
                         ╲ (SIF)?       ╱
                          ╲───────────╱
                               │ No
                               ▼
                    ┌─────────────────────┐
                    │     Check U101       │
                    └─────────────────────┘
```

No Teletext

Are waveforms of QT03/04/05 (E)? — Yes → Check PTV2 connector or Video PWB

No

Are waveforms of pin 32,33,34 of IT01 (TEXT)? — Yes → Check QT03, QT04, QT05

No

Is waveform of pin 23 of IT01 (TV, CV)? — Yes → Check around IT01

No

Is waveform of CT01 (TV, CV)? — Yes → Check around QT01, QT02

No

Check Video PWB

8. Self-Diagnosis Function

This chassis has 2 modes of self-diagnosis function.

(1) PDP panel check mode: It indicates the one latest record of the PDP panel failure with blinking of the power indication light (LED).

(2) Signal circuit check mode: It indicates the check result on some points of the signal circuit and the history of them with On-Screen Display (OSD).

● PDP panel self-diagnosis function

This function is for a PDP panel failure with no picture.

To enter to this Self-Diagnosis mode, follow the next steps:

Preparation:

1) The Power Cord should be connected to AC line and the Main Power switch should be turned on.

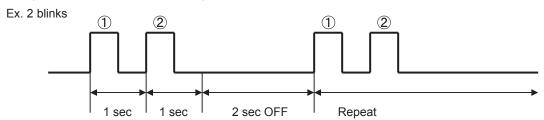2) Turn the power off by the SUB-POWER(⏻) button of the monitor or the remote control.

Procedure:

1) Press the SUB-POWER(⏻) button and ▼ button on the bottom of the monitor at the same time, and keep it for more than 5 seconds after the power turned on.

2) It generates red blinking series of the power indicator light.

3) Any operation would cancel the Self -Diagnosis mode.

4) The next table shows the PDP PWB in which failure most probably would be allocated according to the number of blinks.

Number of red blinks of power indication light	Presumed failing PWB of PDP panel
1	Logic
2	X-SUS
3	Y-SUS, SDM
4	X-SUS, Y-SUS, SDM, PSU
5	ABUS, ADM, PSU
6	ADM temperature
7	ADM temperature
8	All of above-mentioned PWB's

SDM: Scan Driver Module

PSU: Power Supply Unit

ADM: Address Driver Module

Note) SDM is permanently contacted to glass part

[Blinking condition of power indication light]

Ex. 2 blinks

1 sec   1 sec   2 sec OFF   Repeat

32PD5000/42PD5000 (PW1)

● Signal circuit self-diagnosis function

This function is for the failure of the signal circuit, for example the phenomenon as below:

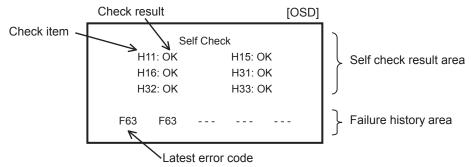"Sometimes power turns off abnormally." "Sometimes picture disappears abnormally."

To enter to this Self-Diagnosis mode, follow the next steps:

Preparation:

1) The Power Cord should be connected to AC line and the Main Power switch should be turned on.

2) Turn the power off by the SUB-POWER(⏻) button of the monitor or the remote control.

Procedure:

1) Press the SUB-POWER(⏻) button and ▲ button on the bottom of the monitor at the same time, and keep it for more than 5 seconds after the power turned on.

2) The monitor will be turned on, and it will display On-Screen Display of the Self-check result and the failure history as below.

3) Any operation would cancel the Self -Diagnosis mode.

4) The following table shows the OSD symbols and contents of failure PWB in which failure most probably would be allocated according to the number of blinks.

Code	stored up in failure history	Self checking item	Problem	Phenomenon	Cause
C10(*	—	—	No sync. (Snow noise)	OSD of " ! Check Antenna " appears.	No connection of ANT cable Preset tuning is not yet
H11(*	—	○	Tuner problem	Cannot receive the main signal from antenna	Communication error of U101
H15	—	○	Composite video SW IC problem	Cannot receive picture and audio Cannot change input mode	Communication error of I201
H16	—	○	Component video SW IC problem	No component picture Cannot change input mode	Communication error of I202
H31	—	○	Color demodulator IC problem	Abnormal color Dark picture	Communication error of I501
H32	—	○	Sync. separator IC problem	Unsynchronized picture	Communication error of I601
H33	—	○	3D Y/C separator IC problem	Abnormal color Dark picture / No picture	Communication error of I302
H71(*	—	○	T/Text IC problem	No T/Text No picture	Communication error of IT01
H72(*	—	○	Sound MPX IC problem	No sound from antenna Cannot change MPX sound	Communication error of IN01
F63	○	—	I²C-bus latch problem	Cannot store setting data (Ex. Channel, Volume etc.)	SCL3/SDA3 latched up
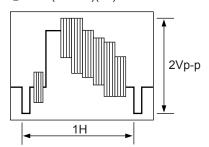
*) This code is no meaning for the models except 32/42PD5000TA because those are without tuner circuit.

If you clear history of failure, make FACTORY RESET: enter the factory setting mode; press the SUB-POWER(⏻) button, INPUT SELECT(⊷) button and ▲ button on the bottom of the monitor at the same time. And keep it for more than 5 seconds after the power turned on.
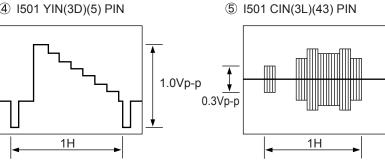
9. Basic circuit diagram

● Waveform
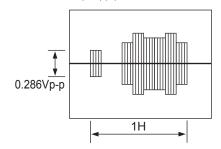
① I201(MAIN.V)(44) PIN
② I201(SUB.V)(53) PIN
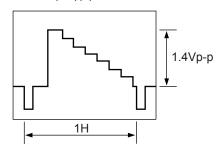
③ I501 YIN(3L)(44) PIN
④ I501 YIN(3D)(5) PIN

⑤ I501 CIN(3L)(43) PIN

2Vp-p

1H

1.0Vp-p

1H

0.3Vp-p

1H
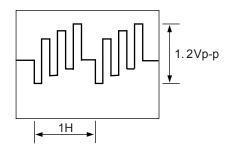
⑥ I501 CIN(3D)(7) PIN
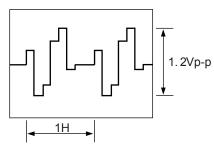
⑦ PYM(MY)(1)PIN
⑧ PYS(SY)(1)PIN

⑨ PYM(MPB)(3)PIN
⑩ PYS(SPB)(3)PIN

0.286Vp-p

1H

1.4Vp-p

1H

1.2Vp-p

1H

⑪ PYM(MPR)(5)PIN
⑫ PYS(SPR)(5)PIN

⑬ TP01(MH)
⑭ TP03(SH)

⑮ TP02(MV)
⑯ TP04(SV)

1.2Vp-p

1H

5.0Vp-p

1H

5.0Vp-p

1V

Basic circuit diagram list

PAS3
EH-2P
Lcn(+) Lcn(-)

PAS4
EH-3P
Rch(+) Rch(-)

L481

L482

SP.TERMINAL L

SP.TERMINAL R

JA402
RED BLACK

JA403
RED BLACK

To POWER UNIT

PPU1
VH-6P(V)
#2.4.5 NC

LED/RECEIVER

INDICATING LAMP
STANDBY/POWER-ON
D002
SPR-54MVW

IR RECEIVER
I001
GP1UM2B1RK

R A G

Vout Vcc GND

R012
4.7K

R011
680

R010
560

Q010
2SC1740S

C002
1000P
CK

C001
100/6.3
CEMD

R013
5.6K

Z107 1
2
Z108 3
4
5
Z109 6

Z201
Z202
Z203

Z209
Z210

Z212

C906
0.47/250V

Z114 L902A Z116
4 3

C902
0.68/250V

Z204

C903
0.22/250V

Z211

Z213

Z115 Z117
2

Z107

K913

EGND
1
2
3

R009
100

L001
100

R013
5.6K

PSC2
PH-6P-H

6 5 4 3 2 1
LEDOFF LED2 LED1 GND REM STB5V

PPU2
VT-2P(H)
1 N Z101
2
L Z102

R902 470K
1/2W

F902

FILTER

Z103 Z104 Z105 Z106
1 2 3 4 5 6 7 8

PSW
VH-8P(V)
#2.3.5.7 NC

ESW
1 2 3 4 5 6 7 8

ESW6 ESW4 ESW1 ESW8

Z141 Z144

Z142 Z143
S900

SW

MAIN SW
P#FG00241

TACT SW

SUB-POWER VOL-DOWN VOL-UP CH-DOWN CH-UP INPUT-SEL MENU
SM01 SM02 SM03 SM04 SM05 SM06 SM07

GND1

RM06
820
RM07
1K
RM08
1.8K
RM09
2.7K
RM10
6.8K

RM05
220

KM04

ECONT
PH-4P

4 3 2 1
GND ADKEY3 ADKEY2 ADKEY1

FILTER/SW/SP.TERMINAL L/SP.TERMINAL R/
LED RECEIVER/TACT SW board (PW1)

A   B   C   D   E   F   G

FILTER/SW/SP.TERMINAL L/SP.TERMINAL R/
LED RECEIVER/TACT SW board (PW1)

55PMA550

FILTER/SW/SP.TERMINAL L/SP.TERMINAL R/
LED RECEIVER/TACT SW board (PW1)

32PD5000/42PD5000

AUDIO board (PW1)

AUDIO/SUB WOOFER board (PW1)

32PD5000/42PD5000

JOINT board (PW1)

VIDEO board 1 (PW1)

VIDEO board 2 (PW1)

VIDEO board 2 (PW1)

TUNER board (PW1)

POWER SUPPLY board (Reference)

9. Printed wiring board diagram

FILTER board

LED/RECEIVER board

SW board

SP TERMINAL L board

TACT SW board
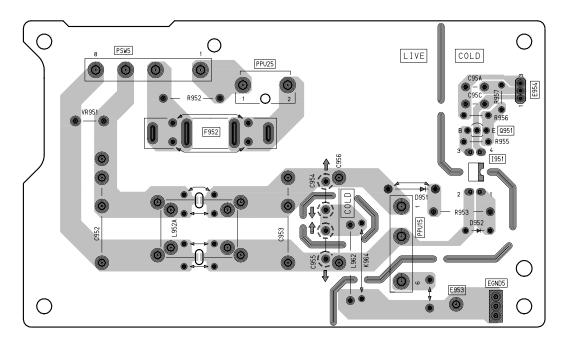
SP TERMINAL R board

Printed wiring board diagram

FILTER board

LED/RECEIVER board

SW board
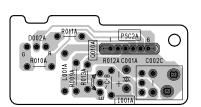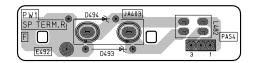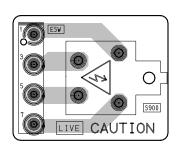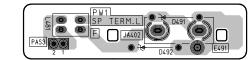
SPEAKER TERMINAL (R) board

TACT SW board
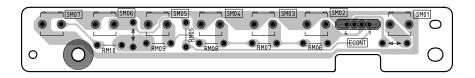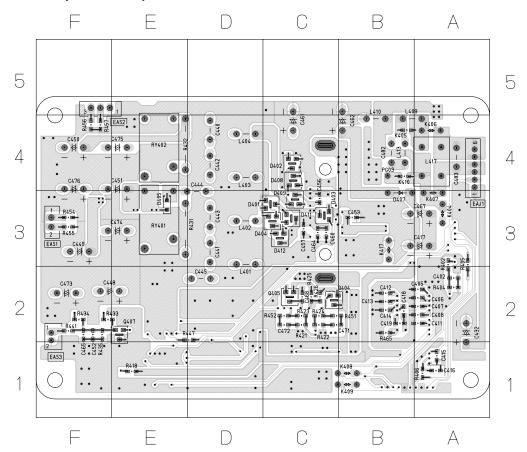
SPEAKER TERMINAL (L) board

AUDIO board (side-A)

AUDIO board (side-B)

Mainly chip parts reference table
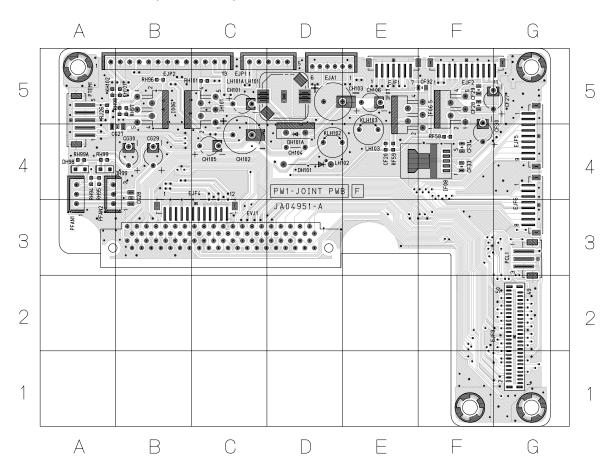
Cir.No.	Position
D406	D2
D410	B1
D413	B2
D414	B2
EAD1	E1
EAF1	F3
IC401	E2
IC402	C1

Cir.No.	Position
IC403	B1
IC404	D3
Q401	B2
Q402	B2
Q403	B2
Q408	B2
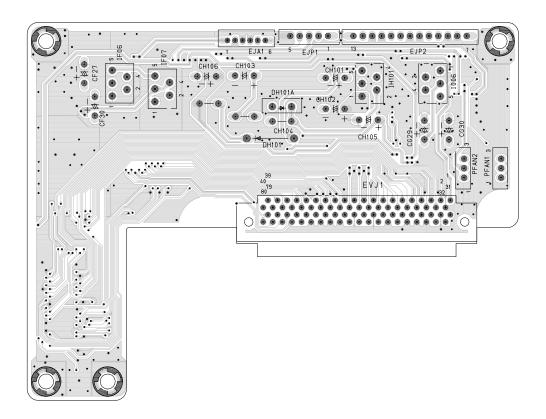
Mainly chip parts reference table

Cir.No.	Position
D401	D3
D402	D4
D403	D3
D404	D3
D405	B3
D408	D4
D409	D3
D411	D3

Cir.No.	Position
D412	D3
K405	E4
K410	E4
Q404	D2
Q405	D2
Q407	B2

JOINT board (side-A)
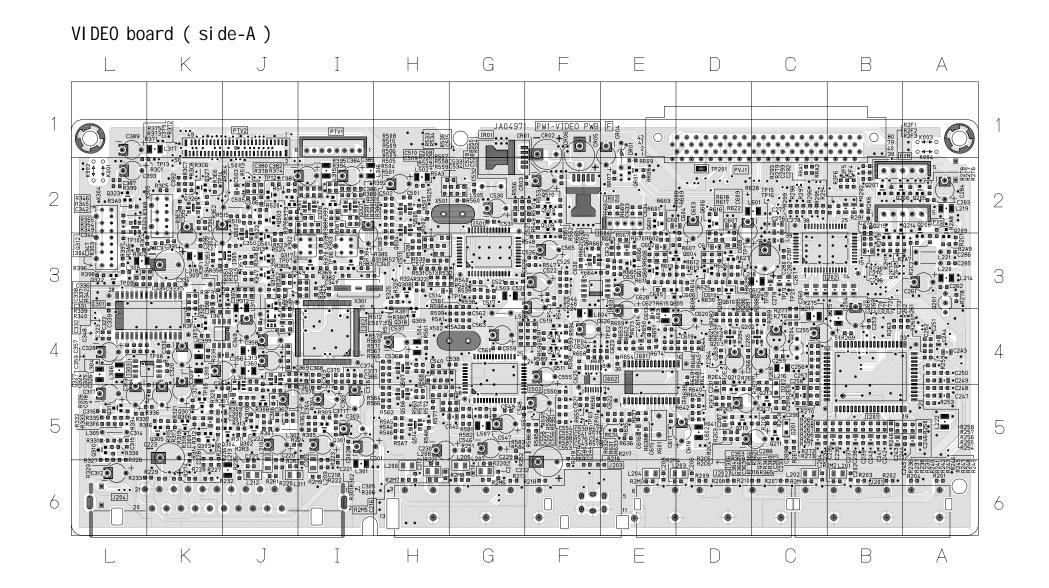
JOINT board (side-B)

Mainly chip parts reference table

Cir.No.	Position
DH98	A4
DH99	A4
EJF1	E5
EJF2	F5
EJF3	G2
EJF4	C3
EJF5	G4
EJF6	G3
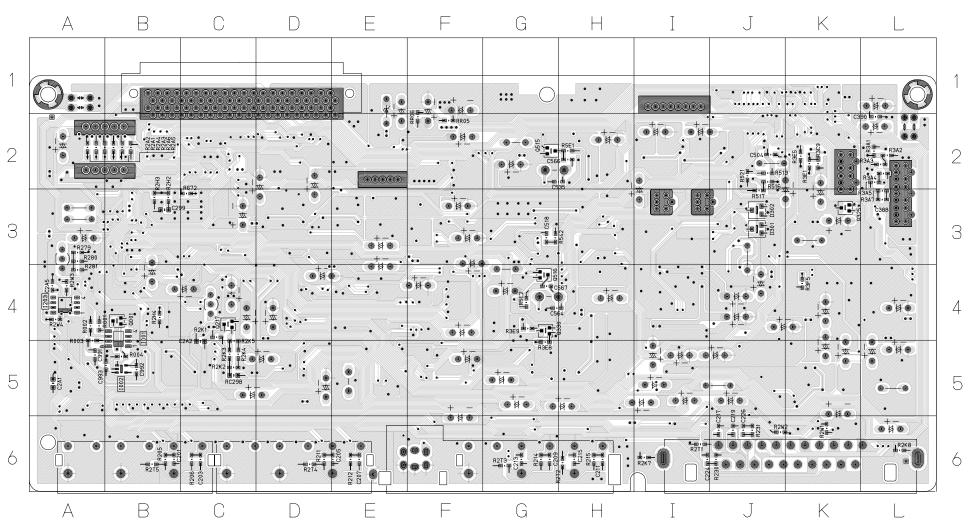
Cir.No.	Position
IFO8	F4
KH101	B5
KH102	A5
LH101	D5
LH101A	D5
PCL1	G3
PTEM1	A5

VIDEO board (side-A)

Mainly chip parts reference table

Cir.No.	Position	Cir.No.	Position	Cir.No.	Position	Cir.No.	Position	Cir.No.	Position
D201	C5	I603	F3	L214	A3	L315	I2	Q206	B2
D202	C5	IR01	G2	L215	B4	L316	I2	Q207	B2
D501	J3	IR02	F2	L216	C4	L317	K1	Q208	A2
I201	B4	L201	B6	L217	C4	L318	K3	Q209	A3
I202	C3	L202	C6	L218	C3	L502	H2	Q210	D5
I301	K4	L203	D6	L219	A2	L503	G3	Q211	C5
I302	I4	L204	E6	L222	A5	L504	H4	Q212	D5
I303	K4	L205	G6	L301	I6	L507	G5	Q213	C5
I304	J4	L206	H6	L304	L4	L601	C2	Q214	B3
I305	J3	L207	G6	L306	L4	L602	D5	Q215	B3
I306	J5	L208	H6	L307	K4	L603	E4	Q301	I5
I307	K4	L209	I6	L308	L3	L604	F4	Q302	J5
I501	G3	L210	J6	L310	K4	PTV2	J1		
I502	G4	L211	J6	L312	J3	Q202	C4		
I601	E4	L212	J6	L313	J4	Q203	D4		
I602	F4	L213	J6	L314	J4	Q205	A2		

VIDEO board (side-B)
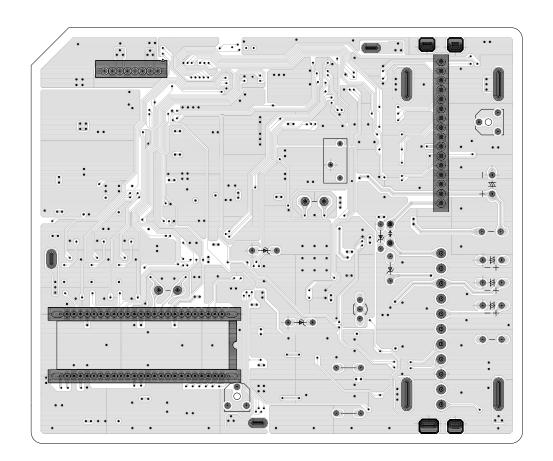
Mainly chip parts reference table

Cir.No.	Position
D301	J3
D302	J3
I001	B4
I002	B5
I203	A4
Q001	B4

Cir.No.	Position
Q217	C4
Q325	K3
Q330	G4
Q515	G2
Q516	G4

TUNER board (Side-A)

TUNER board (Side-B)

Mainly chip parts reference table
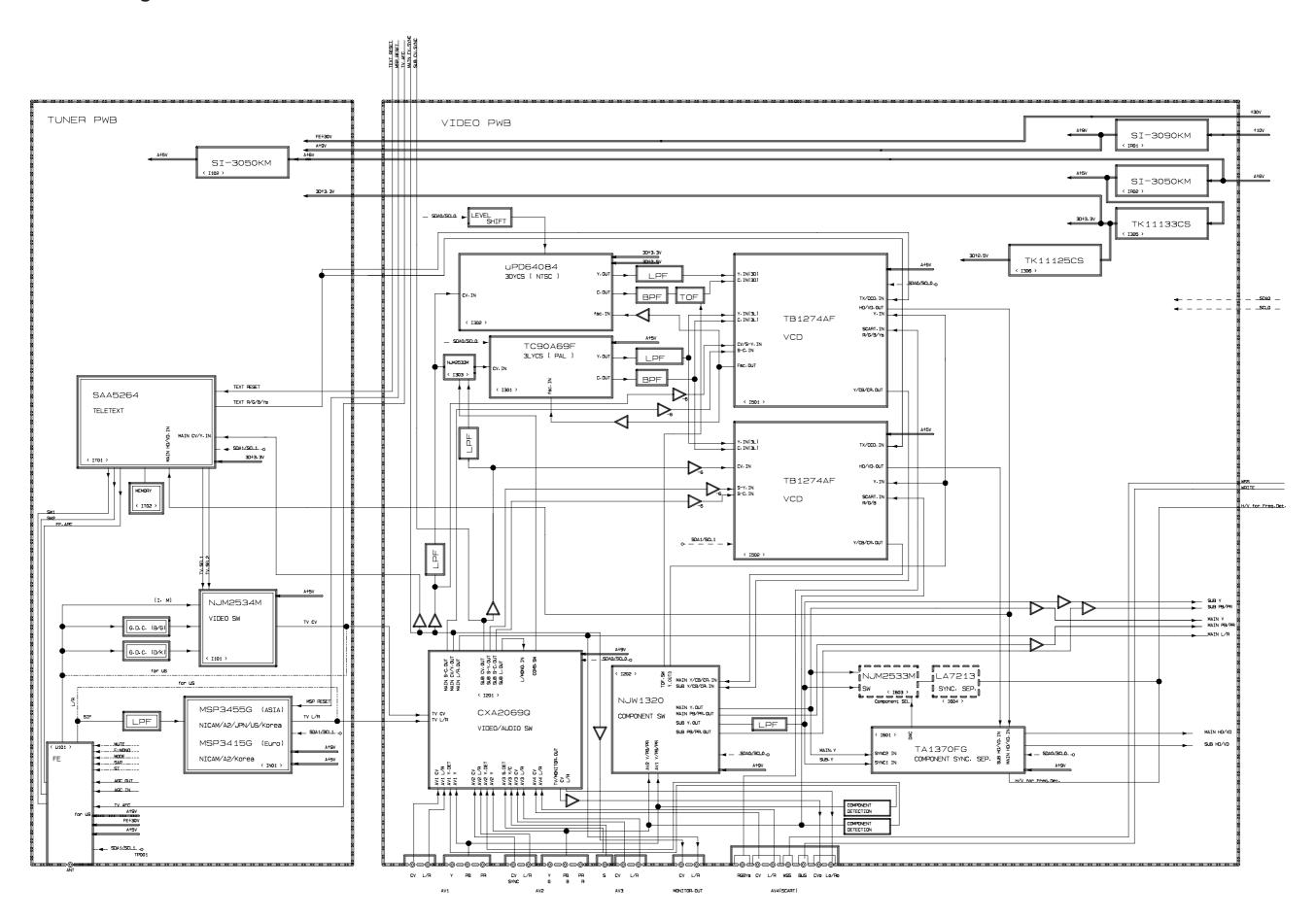
Cir.No.	Position
I101	E2
I102	B5
IC01	B5
IC02	D5
IC03	C4
IN01	E3
IT02	C1
L102	F3
L104	D3
LC01	B4

Cir.No.	Position
LC02	C5
LN01	E4
LN02	D4
LN03	E3
LT01	C3
LT02	A4
PTV2	D6
Q101	F3
Q102	F2
Q103	E2

Cir.No.	Position
Q104	F2
Q105	E2
Q106	D2
Q107	D2
Q108	F5
Q109	E5
QC01	D4
QC02	D5
QC03	B4
QC04	C4

Cir.No.	Position
QN01	D5
QN02	D5
QT01	B2
QT02	B1
QT03	B3
QT04	B3
QT05	B3
QT06	C3

11. Block diagram

Block diagram

TACT SW PWB

LED/RECEIVER PWB
LED   IR

RGB2 Audio IN
RGB1 Audio IN
SW

CPU Main

CPU Sub

RGB2 D-sub 15

RGB1 DVI-D
TMDS
FC4

LVDS Transmitter

FORMATTER UNIT

SPRLY
LED OFF
MUTE

SCL2
SDA2

<I403> BU4052
TRUBASS CONT.

LED OFF DTC.

RELAY DRIVE

MUTE DRIVE

Lch IN
Rch IN

<IC401> NJW1136
MASTER VOL.
BALANCE
BASS
TREBLE CONT.
SURR.ON/OFF

<IC402> NJM2192AM
TRUBASS

MUTE

MUTE

<IC404> TA2021B
DIGITAL POWER AMP

RELAY

RELAY

SP OUT Lch

SP OUT Rch

+12V   +12V   +12V   AUDIO PWB

X Sustain Circuit

Scan Driver

Scan Driver

Y Sustain Circuit

X-SUS. Board

Address Driver

Y-SUS. Board

LVDS Receiver Signal Controller

Data Controller

Driver Controller

PDP PANEL MODULE

LOGIC Board

A+6V
<IH101> SI-8050JF
+6V Reg.
+30V

MAIN L/R

MAIN Y/P_B/P_R
SUB Y/P_B/P_R
MAIN HD/VD
SUB HD/VD

+12V
+10V

D+3.3V
<IF06> SI-3033C
D+3.3V Reg.
+5V

Reg. +5V

SW Reg. VCC

SW Reg. Vs

SW.Reg. Va

$Vs(=70+10 \times Vva)$

$Va(=30+20 \times Vrs)$

<IF07> SI-3033C
D+3.3V Reg.

RELAY SW

D+1.8V
<IF08> SI-3018KM
D+1.8V Reg.

STBY+5V

STBY+3.3V

Reg. STBY+3.3V

SW Reg. STBY+5V

PFC

CPU for P.S.U.

FILTER PWB

AC INLET
WITH
NOISE FILTER

JOINT PWB

POWER SUPPLY UNIT

SW PWB

PW1 CHASSIS CIRCUIT BLOCK DIAGRAM

(Secondary)   (Primary)

55PMA550

PW1(55V) CHASSIS CIRCUIT BLOCK DIAGRAM

TACT SW PWB

LED/RECEIVER PWB
LED   IR

AUDIO PWB

SPRLY
LED OFF
MUTE
SCL2
SDA2

Lch IN
Rch IN

LED OFF DTC.

RELAY DRIVE

MUTE DRIVE

<I403> BU4052 TRUBASS CONT.

<IC401> NJW1136 MASTER VOL. BALANCE BASS TREBLE CONT. SURR.ON/OFF +12V

<IC402> NJM2192AM TRUBASS +12V

MUTE

<IC404> TA2021B DIGITAL POWER AMP +12V

RELAY

RELAY

WOOFER OUT
SP OUT Lch
SP OUT Rch

FORMATTER PWB

RGB2 Audio IN
RGB1 Audio IN
SW

RGB2 D-sub 15
RGB1 DVI-D
TMDS

CPU Main
CPU Sub
FC4

LVDS Transmitter

PDP PANEL MODULE

X Sustain Circuit
Scan Driver
Scan Driver
Y Sustain Circuit

X-SUS. Board
Address Driver
Y-SUS. Board

LVDS Receiver Signal Controller
Data Controller
Driver Controller
LOGIC Board

JOINT PWB

MAIN L/R

MAIN Y/P$_B$/P$_R$
SUB Y/P$_B$/P$_R$
MAIN HD/VD
SUB HD/VD

D+3.3V   <IF06> SI-3033C D+3.3V Reg.
<IF07> SI-3033C D+3.3V Reg.
D+1.8V   <IF08> SI-3018KM D+1.8V Reg.

POWER SUPPLY UNIT

+30V
+12V
+10V
+6V
+5V
STBY+5V
STBY+3.3V

Vs(=70+10xVva)
Va(=30+20xVrs)

Reg. +5V

SW Reg. VCC
SW Reg. Vs
SW.Reg. Va

RELAY SW

SW Reg. STBY+5V
PFC

Reg. STBY+3.3V

CPU for P.S.U.

FILTER PWB

AC INLET WITH NOISE FILTER

SW PWB

(Secondary)   (Primary)

70

12. Connection diagram

12. Connection diagram

13. Wiring diagram

[32PD5000]

Detail of (*1)
1) Release the lock of CN7, and insert No.3 connector in CN7.
2) Lock CN7 to fix the inserted No.3.
3) Insert the other side of No.3 in CN69 completely.

No.3 20PFFC

printed letters side

CN7

CN69

PANEL LOGIC PWB   POWER UNIT

PANEL MODULE

Detail of (*3)

NVS5
P#2169512 No.4

CN1
To PANEL LOGIC PWB

EFM1
To FORMATTER PWB

Detail of (*4)

FERRITE CORE

CONNECTOR WIRE

[32PD5000]

Close the SP terminal
(both L and R).

PAS4

No.22

SP TERMINAL R PWB

P#2169513
NVS10

purse lock

(*7)

CN61

Dress the wire not to
be near the primary
area of POWER UNIT.

No.7

PPU1

FILTER PWB

PPU2

#00W1 purse Lock 15
Bundle the following wires:
Lead of AC INLET,
Lead of POW SW

PSW

E902

No.17

POW
SW

E903

AC
INLET

(*6)

Pass it under the wire
from AC INLET.

PSC2

LED/RECEIVER PWB

Pay attention not to pinch the wire by rear cover.

POWER UNIT

CNPPS

(*4)
Wind the wire by
1 turn.
P#2169512

No.6

NVS3

SP TERMINAL L PWB

No.21

No.22

PAS3

Wind the wire by
1 turn.
P#2169513
NVS2

A

No.10

AUDIO PWB

EAS2

No.24

EAS1

No.15

purse lock

No.5

CN63

EJP2 EJP1 EJA1 EJF1 EJF2

EAJ1

EAF1

No.18

No.14

purse lock

(*4)

EJF5

purse lock

EJF4

purse lock

No.13

NITTOH
TAPE

EJF6

EFJ2 EFJ1 EFJ4 EFA1 EFL1 EFG1 EFG2

NVS8

P#GX00402

SK-binder

NVS4

P#GX00402

EJF3

EFJ3
(*8)

No.11

EFK1

FORMATTER UNIT

No.16

NVS1 P#BZ10611

EFM1

No.12

No.25

To previous page

TACT SW PWB

ECONT (*5)

Detail of (*5)

No.16

ECONT

TACT SW PWB

Detail of (*6)

N

GND

L

E903

2
1

E902

(black)

(white)

A view

E901
SUP-C14608

LABEL

B view

A view

B view

Faston connector with Lock:
Connect it completely to be locked.
Disconnect it pushing the button to release the lock.

Detail of (*7)

PPU1

6

1

(blue)

(orange)

(brown)

CN61

6

1

NVS10

P#2169513

Detail of (*8)
Pass No.12 connector through NVS1.
Insert it in EJF3/EFJ3 and push the stopper down to lock.

Flat core
NVS1

FORMATTER PWB

EJF3

50P Flat cable
No.12

stopper

blue band

electrode side

EJF3

JOINT PWB

Detail of A

NVS2

No.5

50mm

To Power unit
CN63 side.

NITTOH TAPE

Wiring diagram

37PD5000 1/2

POWER UNIT

No.1

CN23

CN64

P#GX00402
NVS7

PANEL Y-SUS

CN69 CN68

No.3   No.2

(*1) 20P FFC (*2) (*4) (*2)

PANEL X-SUS

CN7   CN6

PANEL LOGIC

(To FORMATTER PWB)

No.4

To next page

CN1

P#2169512 NVS5

PANEL ABUS-L

PANEL ABUS-R

(*3)

Detail of (*1)
Printing part of No.3 connector should be set to module side of panel.
1) Release the lock of CN7, and insert No.3 connector in CN7.
2) Lock CN7 to fix the inserted No.3.
3) Insert the other side of No.3 in CN69 completely.

No.3 20PFFC

printed letters side

③

CN7

②

①

CN69

PANEL LOGIC PWB

POWER UNIT

PANEL MODULE

Detail of (*3)

NVS5
P#2169512 No.4

CN1
To PANEL LOGIC PWB

EFM1
To FORMATTER PWB

Detail of (*4)

FERRITE CORE   CONNECTOR WIRE

Wiring diagram 2/2

Detail of (*5)

No.18

ECONT   TACT SW PWB

Detail of (*6)

N   E903   (black)   E901
                                  SUP-C14608
                                  LABEL   ← B view
           GND
                       E902
L   A view   (white)
                       A view
                                                    B view

Faston connector with Lock:
Connect it completely to be locked.
Disconnect it pushing the button to release the lock.

Detail of (*7)

PPU1   (Green)   CN61
6   (Black)   6
              (White)
1   1
                       NVS10

Detail of (*8)
Pass No.12 connector through NVS1.
Insert it in EJF3/EFJ3 and push the stopper down to lock.

Flat core
NVS1   FORMATTER PWB   EFJ3

50P Flat cable
No.12

stopper   blue band   electrode side

EJF3   JOINT PWB

[42PD5000]

POWER UNIT

CN64

No.1

PANEL Y-SUS

CN69

(*1)

CN68

NVS7
P#GX00402

No.3
20P
FFC

No.3

No.2

(*4)

PANEL X-SUS

CN6
To FORMATTER PWB

CN7

No.4

PANEL LOGIC

P#2169512

CN1

(*3)

NVS5

To next page

PANEL ABUS-L

PANEL ABUS-R

Detail of (*1)
1) Release the lock of CN7, and insert No.3 connector in CN7.
2) Lock CN7 to fix the inserted No.3.
3) Insert the other side of No.3 in CN69 completely.

No.2   20PFFC

③

printed letters side

①

②

CN7

CN69

PANEL LOGIC PWB

POWER UNIT

PANEL MODULE

Detail of (*3)

NVS5
P#2169512

NVS9
P#2169511

NVS6
P#2169511

No.4

CN1
To PANEL LOGIC PWB

EFM1
To FORMATTER PWB

Detail of (*4)

FERRITE CORE

CONNECTOR WIRE

[42PD5000]

PANEL Y-SUS

PANEL X-SUS

CNPPS

No.6

POWER UNIT

(*4) Wind the wire by 1 turn. P#2169512 NVS3

(*4) Wind the wire by 1 turn. P#2169513 NVS2

#00W3 SK binder Fix the ferrite core with the holder of bracket after clamping.

SP TERMINAL R PWB
PAS4

CN61

No.7

CN63

No.5

SP TERMINAL L PWB
PAS3

No.24

AUDIO PWB

EAS2

P#2169513 NVS10

EAJ1

EAF1

No.20

No.21

EAS1

No.16

(*8)

P#GX00402 NVS8

No.22

EJP2 EJP1 EJA1 EJF1 EJF2

No.12

No.15

#00W1 SK binder
Bundle the following wires:
Lead of AC INLET,
Lead of POW SW,
GND wire No.27.

No.19

(EJF4 ↔ EFJ4)
P#GX00402 NVS4

EJF4

EJF5

EJF6

FILTER PWB

No.27

PPU1

No.15

No.13

No.17

EJF3

EFJ2 EFJ1 EJF4 EFA1 EFL1 EFG1 EFG2

EFJ3

No.14 (*9)

EFK1

FORMATTER UNIT

NVS1
P#BZ10611

EFM1

PSW PPU2 PCV sheet

NVS9
P#2169511

from panel module
No.4

No.18

#00W2 SK binder Fix the ferrite core with the holder of panel module after clamping.

ESW

POW SW

LABEL

(*7)

NVS6 P#2168511

PSC2 LED/RECEIVER PWB

Pass the wire under PCV sheet.

To previous page

ECONT (*5)

TACT SW PWB

Pay attention not to pinch the wire by rear cover.

Detail of (*5)

No.18

ECONT   TACT SW PWB

Detail of (*8)

6   (blue)   6
     (orange)
1   (brown)   1

NVS10

Detail of (*7)

N

GND

L

E903   black   E901

E902   white   LABEL

Faston connector with Lock:
Connect it completely to be locked.
Disconnect it pushing the button to release the lock.

Detail of (*9)

Pass No.14 connector through NVS1.
Insert it in EJF3/EFJ3 and push the stopper down to lock.

Flat core
NVS1

FORMATTER PWB

EJF3

50P Flat cable
No.14

stopper   blue band   electrode side

EJF3   JOINT PWB

55PMA550

Wiring diagram

Wiring diagram 1/2

From		Connector	To	
Connecting Point	P.W.B.	Wire	Connecting Point	P.W.B.
CN21	POWER	NO1	CN21	PANEL X-SUS
CN3	POWER	NO2	CN3	PANEL LOGIC
EFM1	FORMATTER	NO4	CN1	PANEL LOGIC
CN63	POWER	NO5	EJP1	JOINT
CNPPS	POWER	NO6	EJP2	JOINT
CN61	POWER	NO7	PPU15	FILTER
EJF1	JOINT	NO12	EFJ1	FORMATTER
EJF2	JOINT	NO13	EFJ2	FORMATTER
EJF3	JOINT	NO14	EFJ3	FORMATTER
EJF4	JOINT	NO15	EFJ4	FORMATTER
EFG1	FORMATTER	NO16	EJF5	JOINT
EFG2	FORMATTER	NO17	EJF6	JOINT
EFK1	FORMATTER	NO18	ECONT	TACT SW
EFL1	FORMATTER	NO19	PSC2	LED/RECEIVER
EFA1	FORMATTER	NO20	EAF1	AUDIO
EAS1	AUDIO	NO21	PAS3	SP TERMINAL L
EAS2	AUDIO	NO22	PAS4	SP TERMINAL R
EJA1	JOINT	NO24	EAJ1	AUDIO
EAS3	AUDIO	NO28	EAS4	SUB WOOFER
AC INLET	AC INLET	E902	PPU25	FILTER
AC INLET	AC INLET	E903	Chassis GND	Chassis GND
PSW5	FILTER	ESW	ESW	SW

Wiring diagram 2/2

POWER UNIT

PANEL Y-SUS

PANEL LOGIC

PANEL X-SUS

Wind the wire by 1 turn.
NVS7 (*4)

No.2

No.6

Wind the wire by 1 turn.
NVS3 (*4)

CNPPS

#00W7 SK binder
Fix the ferrite core
by the hole of frame
metal after clamping.

#00W7

Wind the wire by 1 turn.
NVS2 (*4)

No.5

CN63

CN3

CN3
(*3) (From
PANEL MODULE)
No.4

EAS1 EAS3

EAS2

#00W6 SK binder
Fix the wire by the
hole of frame metal.

#00W6

CN61

NP03
Purse Lock 11.5

NP02
Purse Lock
11.5

No.21

No.12

NVS5
(*8)

AUDIO PWB

No.24

No.20

No.17

No.28

NVS10

EJP2

EJA1 EJF2

EJF5

No.16

EAJ1 EAF1

NVS11

No.7

EJP1

EJF1

No.13

EFL1

EFG1

NP04
Purse Lock 5

EJF4

EJF6

EFJ2

EFA1

EFK1

EFG2

No.15

NVS4

EJF3

EFJ1

EFJ4

No.19

No.22

#00W4

#00W5

FORMATTER UNIT

#00W4/#00W5 SK binder
Tie the wire to fix the
ferrite core.

(*7)

EFJ3

EFM1

No.19

No.18

NVS1

Close the SP terminal
(both L and R).

NP01
Purse Lock 15

EAS4

SP TERMINAL R PWB

FILTER PWB

No.14

NP06
Purse Lock 11.5
11.5

PPU15

SUB WOOFER PWB

NVS6

PAS3

E902

NVS9

No.18

SW PWB

Screw

PSW5 PPU25

ESW

PAS4

ESW

AC INLET

TACT SW PWB

SP TERMINAL L PWB

PSC2

(*6)

NP05
Purse Lock 15

E903

Pay attention not to pinch the wire by rear cover.

ECONT

(*5)

LED/RECEIVER PWB

Detail of (*8)

No.4

NVS5

metal

FORMATTER UNIT

ZP01
NITTOH TAPE #5 W20 L10

Detail of (*5)

No.18

ECONT

TACT SW PWB

Detail of (*3)

NVS5
P#2169512

No.4

NVS9
P#2169511

NVS6
P#2169511

CN1
To PANEL LOGIC PWB

EFM1
To FORMATTER PWB

Detail of (*4)

FERRITE CORE

CONNECTOR WIRE

Detail of (*6)

(white)

(LABEL)

(black)

E902

E903

E901 AC INLET

Faston connector with Lock:
Connect it completely to be locked.
Disconnect it pushing the button to release the lock.

Detail of (*9)

Pass No.14 connector through NVS1.
Insert it in EJF3/EFJ3 and push the stopper down to lock.

Flat core
NVS1

FORMATTER PWB

EJF3

50P Flat cable
No.14

electrode side

stopper

blue band

EJF3

JOINT PWB

14. Disassembly diagram

[32PD5000]
The figure of FHP Panel Module (32V)

Rear view
(The state of a panel simple substance.)

Y-SUS PWB ASS'Y
Manufactured at FHP factory.

LOGIC PWB ASS'Y
Manufactured at FHP factory.

X-SUS PWB ASS'Y
Manufactured at FHP factory.

Attachment for packing
∗ Apply it before packing this panel module.

Handle

Attachment for packing
∗ Apply it before packing this panel module.

Handle

(4)
PANEL Y-SUS

(3)
PANEL X-SUS

PANEL LOGIC
(2)

PANEL ABUS-L
(5)

PANEL ABUS-R
(6)

Attachment for packing
∗ Apply it before packing this panel module.

Handle for packing
∗ Apply it before packing this panel module.

L-ADR PWB ASS'Y
Manufactured at FHP factory.

R-ADR PWB ASS'Y
Manufactured at FHP factory.

Attachment for packing
∗ Apply it before packing this panel module.

Handle for packing
∗ Apply it before packing this panel module.

No.	Spare Part Name	FHP Spare Part#
(1)	Panel Module	FPF32C106128UB-55
(2)	LOGIC PWB Ass'y	FPF20R-LGC0001(A1 ASIC)
(3)	X-SUS PWB Ass'y	FPF20R-XSS0001
(4)	Y-SUS PWB Ass'y	FPF20R-YSS0002
(5)	A-BUS L PWB Ass'y	FPF20R-ABL0003
(6)	A-BUS R PWB Ass'y	FPF20R-ABR0004

Panel Module (32V)

[The assembled form in a product (before servcing)]

Handle

Handle

PANEL Y-SUS

PANEL X-SUS

PANEL
LOGIC

PANEL ABUS-L

PANEL ABUS-R

Panel Holder x2

* Remove these holders
and apply the handles /
attachments for packing.

[42PD5000]

《 Screw and label of backcover 》

The codes in brackets shown in the disassembly diagram express the name of materials.
The key o the codes and materials is shown on the table below.

Code	Material
ABS	Acrylonitrile Butadiene Styrene
Fe	Steel
PS	Polystyrene
PC+ABS	Polycarbonate+Acrylonitrile Butadiene Styrene

37PD5000

【 Screw,label, and etc. of backcover 】

The codes in brackets shown in the disassembly diagram express
the name of materials.
The key o the codes and materials is shown on the table below.

Code	Material
ABS	Acrylonitrile Butadiene Styrene
Fe	Steel
PS	Polystyrene
PC+ABS	Polycarbonate + Acrylonitrile Butadiene Styrene
PC	Polycarbonate

55PMA550

14. Disassembly diagram

《 Screw,label, and etc. of backcover 》

The codes in brackets shown in the disassembly diagram express
the name of materials.
The key o the codes and materials is shown on the table below.

Code	Material
Fe	Steel
PC+ABS	Polycarbonate + Acrylonitrile Butadiene Styrene

Please be careful when carrying POWER SUPPLY UNIT
since it consists most of the heavy parts.
When carrying, please do not bend the unit,
and also do not add stress on the side of parts soldered.

The figure of FHP Panel Module (42V)

(Rear view
The state of a panel simple substance.)

Y-SUS PWB ASS'Y
Manufactured at FHP factory.

LOGIC PWB ASS'Y
Manufactured at FHP factory.

X-SUS PWB ASS'Y
Manufactured at FHP factory.

PANEL Y-SUS

PANEL X-SUS

PANEL LOGIC

PANEL ABUS-L

PANEL ABUS-R

L-ADR PWB ASS'Y
Manufactured at FHP factory.

R-ADR PWB ASS'Y
Manufactured at FHP factory.

Attachment for packing x8

✽ Apply these attachments
before packing this panel
module.

No.	Spare Part Name	FHP Spare Part#
1	Panel Module	FPF42C128128UC-55
2	LOGIC PWB Ass'y	FPF23R-LGC0005 (A1 ASIC)
3	X-SUS PWB Ass'y	FPF23R-XSS0005
4	Y-SUS PWB Ass'y	FPF23R-YSS0006
5	A-BUS L PWB Ass'y	FPF23R-ABL0001
6	A-BUS R PWB Ass'y	FPF23R-ABR0002

The figure of FHP Panel Module (37V)
(Rear view
The state of a panel simple substance.)

Y-SUS PWB ASS'Y
Manufactured at FHP factory.

LOGIC PWB ASS'Y
Manufactured at FHP factory.

X-SUS PWB ASS'Y
Manufactured at FHP factory.

Attachment for packing
* Apply it before packing
this panel module.

Attachment for packing
* Apply it before packing
this panel module.

Handle

Handle

(4)
PANEL Y-SUS

(3)
PANEL X-SUS

(2)
PANEL LOGIC

(5) PANEL ABUS-L

(6) PANEL ABUS-R

Attachment for packing
* Apply it before packing
this panel module.

Attachment for packing
* Apply it before packing
this panel module.

Handle for packing
* Apply it before packing
this panel module.

L-ADR PWB ASS'Y
Manufactured at FHP factory.

R-ADR PWB ASS'Y
Manufactured at FHP factory.

Handle for packing
* Apply it before packing
this panel module.

No.	Spare Part Name	FHP Spare Part#
(1)	Panel Module	FPF37C128128UB-75
(2)	LOGIC PWB Ass'y	FPF22R-LGC0003(A1 ASIC)
(3)	X-SUS PWB Ass'y	FPF22R-XSS0003
(4)	Y-SUS PWB Ass'y	FPF22R-YSS0004
(5)	A-BUS L PWB Ass'y	FPF22R-ABL0005
(6)	A-BUS R PWB Ass'y	FPF22R-ABR0006

Panel Module (37V)
 [The assembled form in a product (before servicing)]

Handle

Handle

PANEL Y-SUS

PANEL X-SUS

PANEL
LOGIC

PANEL ABUS-L

PANEL ABUS-R

Panel Holder x2
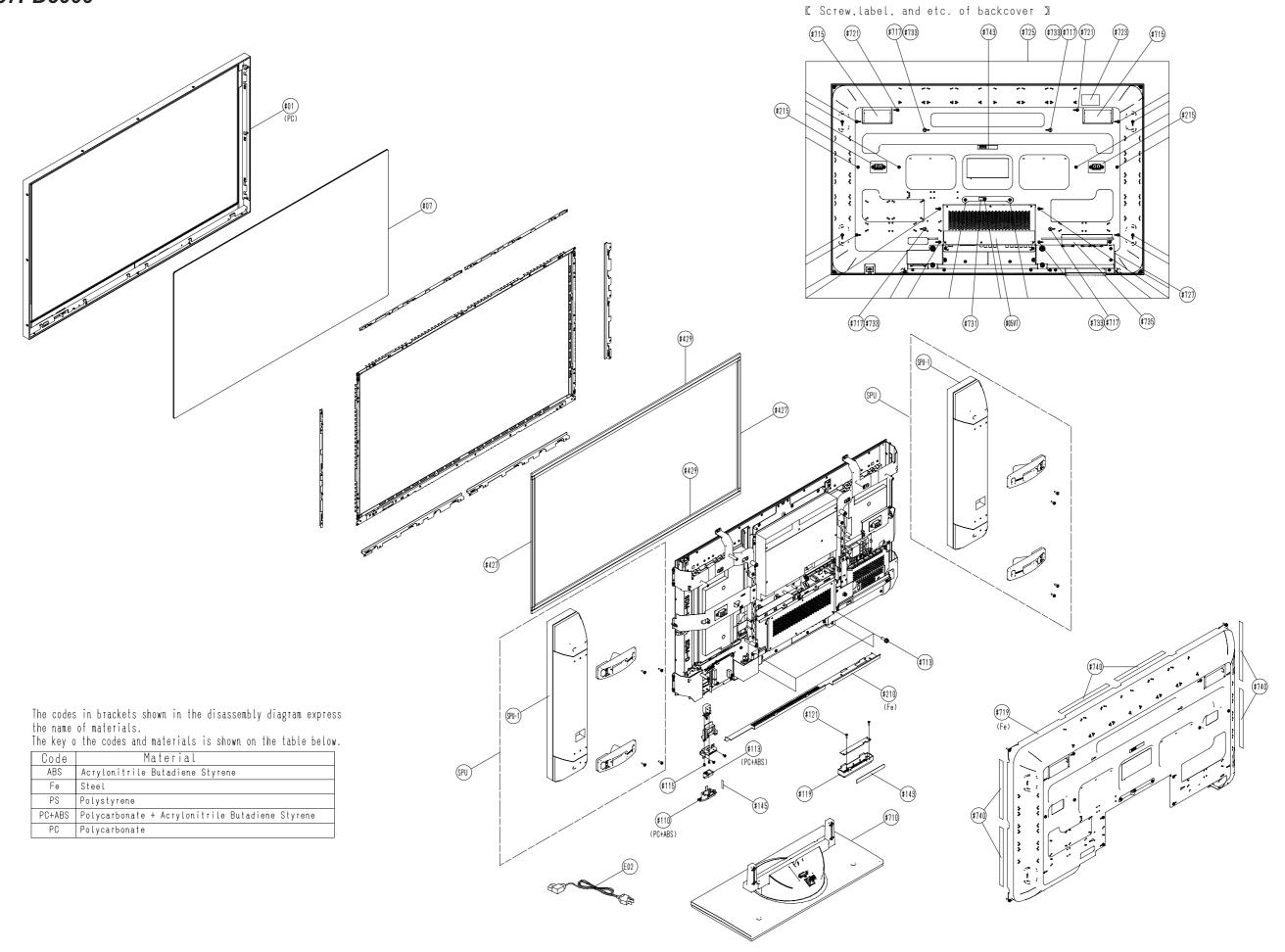
* Remove these holders
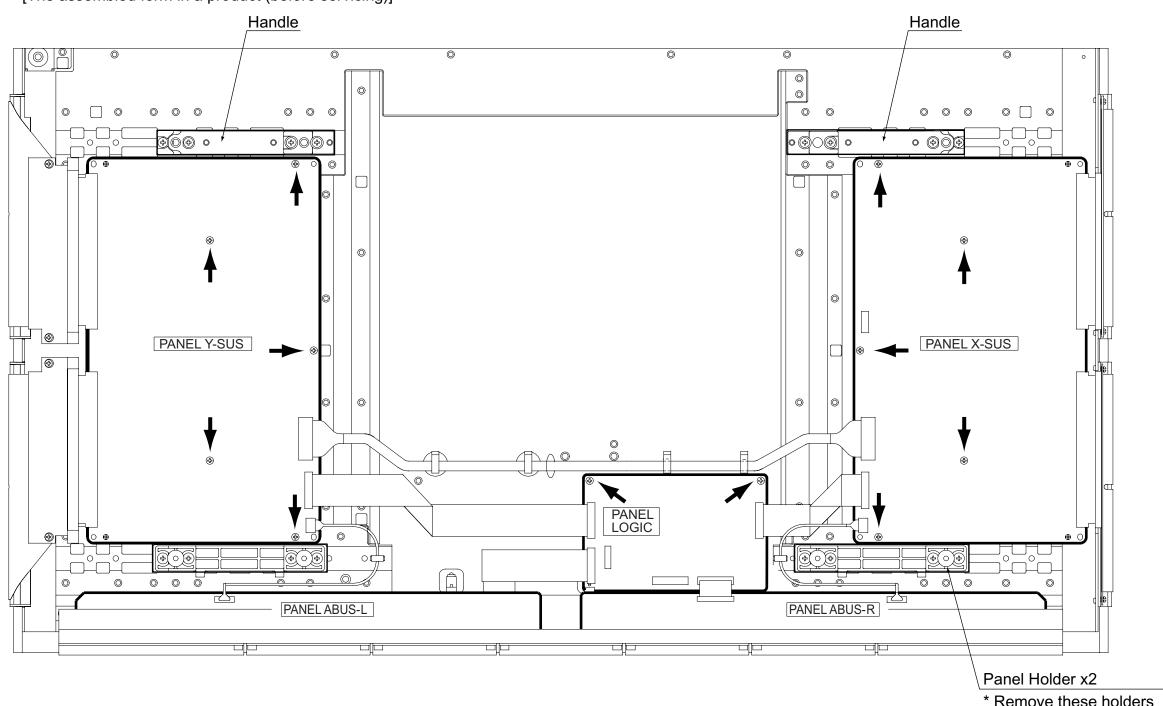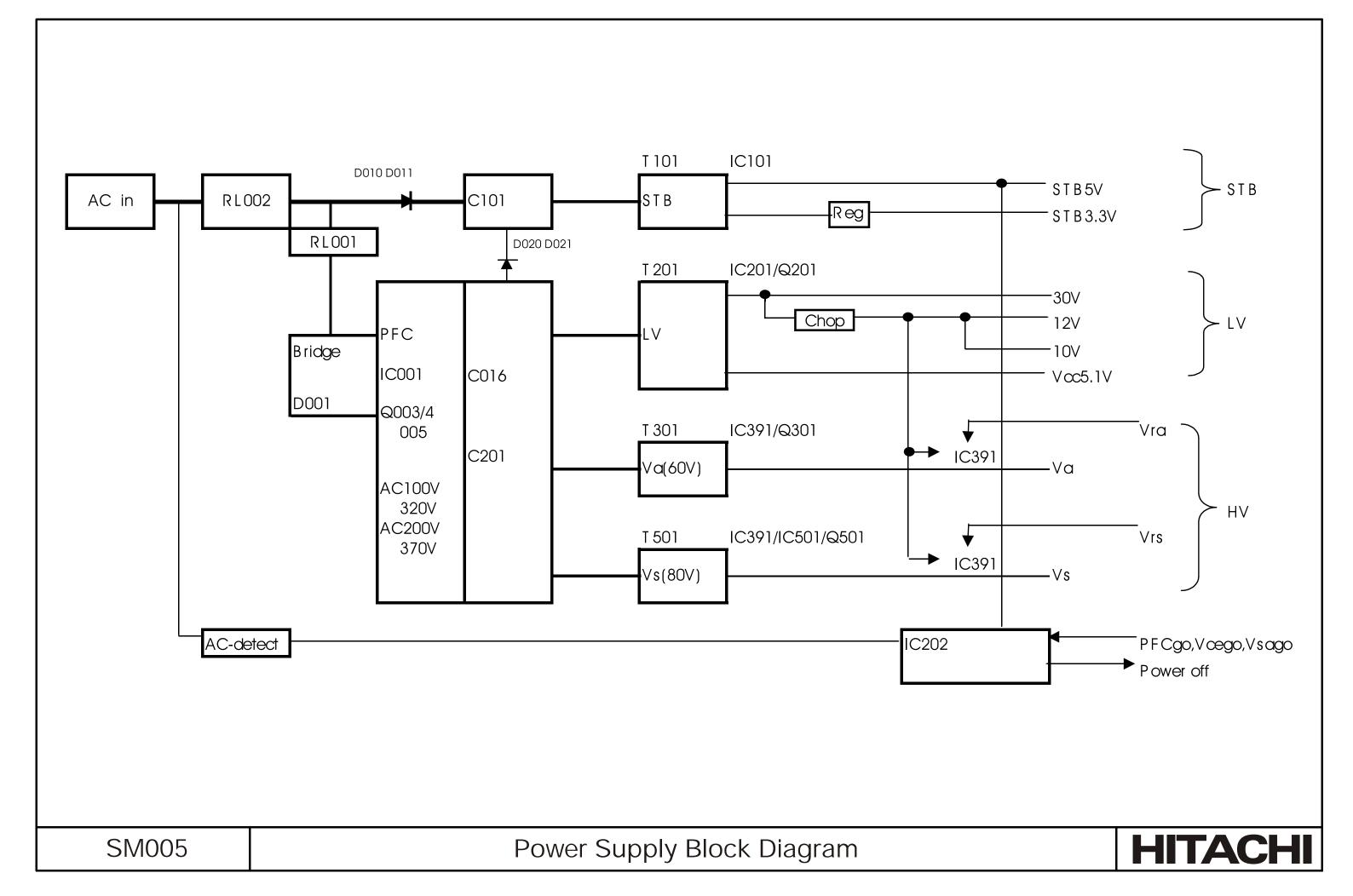 and apply the handles /
  attachments for packing.

55PMA550

The figure of FHP Panel Module

(Rear view
The state of a panel simple substance.)

ABus-U PWB ASS'Y
Manufactured at FHP factory.

Handle × 6

PANEL A BUS-U1 PANEL A BUS-U2 PANEL A BUS-U3 PANEL A BUS-U4

Y-SUS PWB ASS'Y
Manufactured at FHP factory.

X-SUS PWB ASS'Y
Manufactured at FHP factory.

PANEL Y-SUS

PANEL LOGIC

PANEL X-SUS

LOGIC PWB ASS'Y
Manufactured at FHP factory.

PANEL A BUS-D1 PANEL A BUS-D2 PANEL A BUS-D3 PANEL A BUS-D4

ABus-D PWB ASS'Y
Manufactured at FHP factory.

Handle for packing

＊ Apply it before packing
this panel module.

ABus-D PWB ASS'Y
Manufactured at FHP factory.

No.	Spare Part Name	FHP Spare Part#
1	Panel Module	FPF42C128128UC-55
2	LOGIC PWB	FPF23R-LGC0005 (A1 ASIC)
3	X-SUS PWB	FPF23R-XSS0005
4	Y-SUS PWB	FPF23R-YSS0006
5	A-BUS L PWB	FPF23R-ABL0001
6	A-BUS R PWB	FPF23R-ABR0002

Dimensions of 42PD5000

Clamping Screw Holes of Tabletop Stand (2 Places)

300

30° (Manual Turn)

30° (Manual Turn)

(135) PDP
(197) Speaker

PDP Back Cover

128.6
300

PDP Front Top

116.4

(136) PDP
(187) Speaker

Tabltop Stand

700

Screw holes (a) for hanging PDP

* 4 Places
* Screw type: M6
* Screw hole depth: 20 mm

Available Area for System Label
Max W140 x H100 mm

Screen Center

414

1233 (PDP and Speaker)

1030 (PDP)

101.5 (Speaker)

101.5 (Speaker)

PDP Bezel

90.2

Speaker Holder (4 Pieces)
(Parts of Speaker)

956

925 (Filter Glass Black Area)

922 (Active Area)

Available Area for
System Label
Max W120 x H15 mm

Speaker terminal

(a)   (a)

Screen Center

102

Screen Center

206

Screen Center

713
636

Screen Center

Speaker terminal

556
525 (Filter Glass Black Area)
522 (Active Area)

320.5

(a)

(a)   (a)

77

HITACHI

Speaker   PDP   Tabletop Stand

Power Indicating Lamp
Remote-control Receiver

Speaker

1.2 (Decoration Plate)
* 42PD5000E/TE only

PDP Front Top

AC Power Button   AC Inlet

Extentsion Unit Fixing Screw (c)
(M3, 2 Pcs.)

Tabletop Stand Fixing Screw (b)
(M6, 4 Pcs.)

(b)

(b)

(c)

AC Power Button

AC Inlet

Tuner and Video Terminal

Formater Terminal

Key Button

42PD5000TE

THE UPDATED PARTS LIST

FOR THIS MODEL IS

AVAILABLE ON ESTA

Power Supply Block Diagram

SM005

HITACHI

1.AC input

No	CN61
1	AC(L)
2	NC
3	AC(N)
4	NC
5	NC
6	FG

2.signal 1

No	CN63
1	STB5V
2	NC
3	STB3.3V
4	Power off
5	GND

3.Signal 2

No	CNPPS
1	30V
2	GND
3	GND
4	5V
5	5V
6	GND
7	GND
8	12V
9	12V
10	GND
11	GND
12	10V
13	10V

4.Panel 1

No	CN64
1	Va
2	NC
3	Vcc
4	GND
5	GND
6	GND
7	NC
8	Vs
9	Vs
10	Vs

5.Panel 4

No	CN68
1	STB3.3V
2	NC
3	GND
4	GND
5	NC
6	Vcc

6.Panel 5
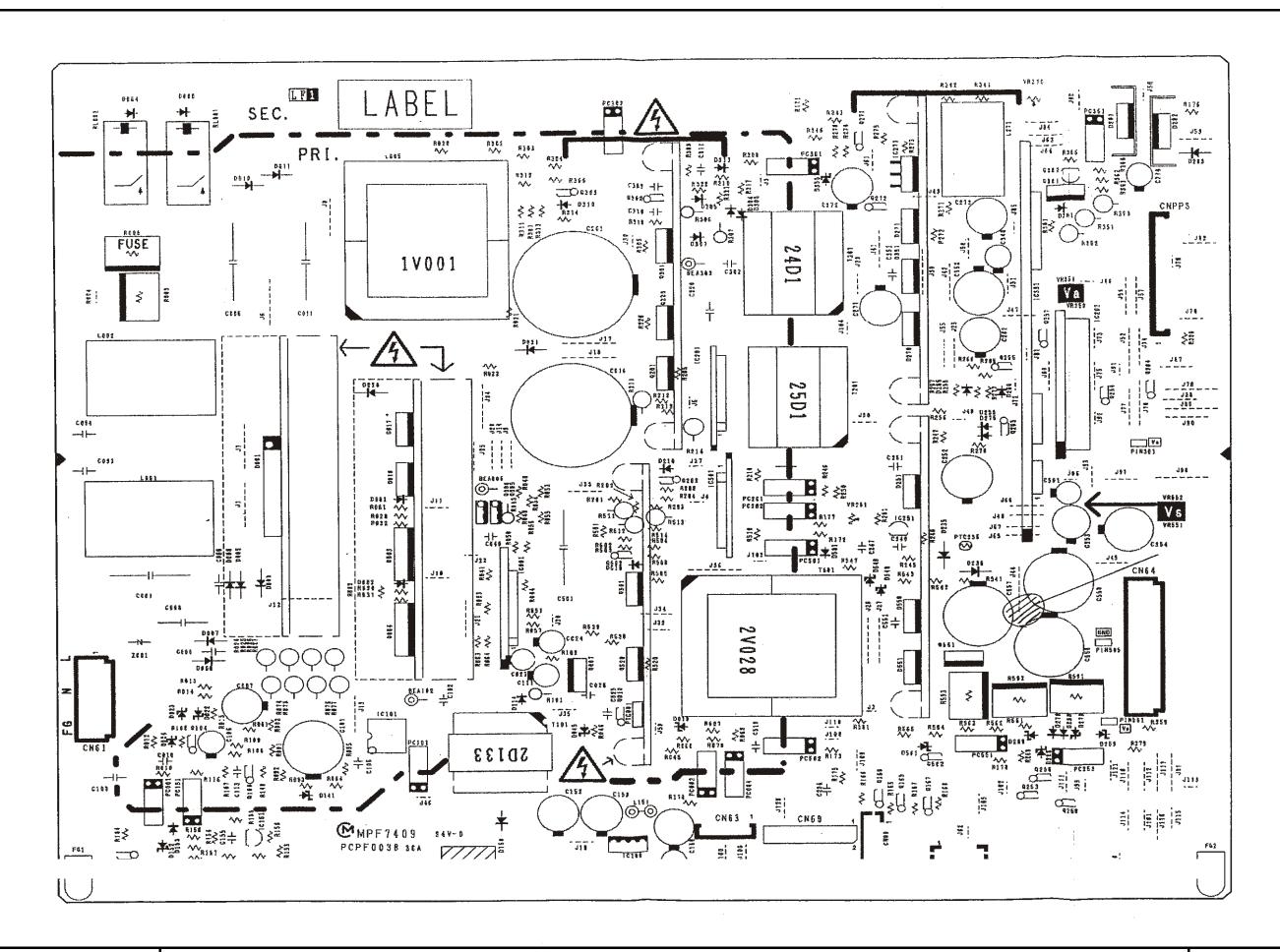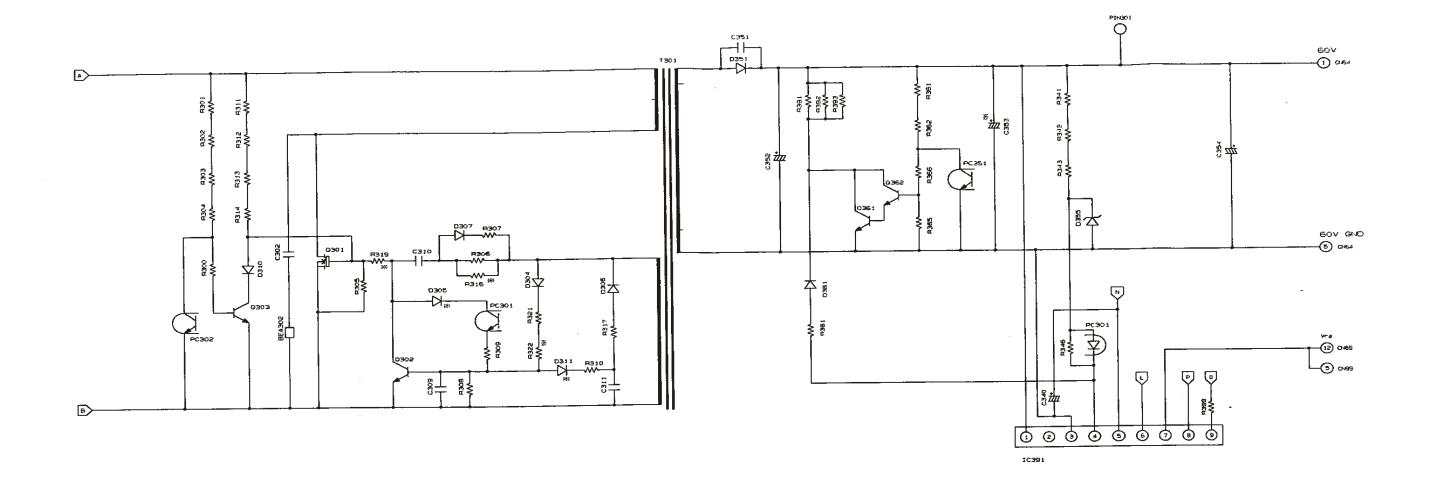
No	CN69
1	NC
2	NC
3	NC
4	NC
5	GND
6	Vsago
7	GND
8	Vcego
9	GND
10	PFCgo
11	GND
12	Vra
13	GND
14	Vrs
15	GND
16	NC
17	GND
18	NC
19	GND
20	NC

SM005 | Panel Connectors | **HITACHI**

※ : OPTIONAL

※ : OPTIONAL

※ : OPTIONAL

NO POWER — NO Vs,Va,Vcc,STB

FUSE
- OK
- NG → impedance check D001
  - NG → D001
  - OK → Impedance check Q003/Q004
    - NG → Q003/Q004, etc
    - OK → Impedance check Q201
      - NG → Q201,IC201 D210,Q202,etc
      - OK → Impedance check Q301
        - NG → Q301, D310,Q303, Q302,etc

STB
- OK
- NG → check voltage D011(k)-J13
  - over 130V → D151,Q104, Q108,etc
  - under 130V → IC101,R005

NO PICTURE & SOUND 1 — NO Vs,Va,Vcc

STB
- NG → See NO POWER
- OK
  - Vcc
    - OK
    - NG → check voltage J9 - J13
      - over 300V → IC201,Q202,PC201, PC202,PC253, D210,etc
      - under 300V → IC001,D005 D008, RL001,PC003,Q010,etc

NO PICTURE & SOUND 2 — NO Vs,Va,Vcc

impedance check Vs LINE
- OK
- NG → open connector CN64
  - impedance check Vs LINE
    - NG → D551,D550
    - OK → PDP module Vs NG

impedance check Va LINE
- OK
- NG → open connector CN64
  - impedance check Va LINE
    - NG → D351
    - OK → PDP module Va NG

SW ON
- Va:no uprise Vs:down after up → Q303, PC301,PC302 D310,IC391, etc
- Vs:no uprise Va:down after up → IC391,Q501, IC501,D510, Q502,PC501, PC502,D235, D236,etc

Vcc LINE is down, when Vs,Va LINE is down in MPF7409 L.

Power Supply Unit Troubleshooting

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